Heath's Pedagogical Library — 37

READING

—

A MANUAL FOR TEACHERS

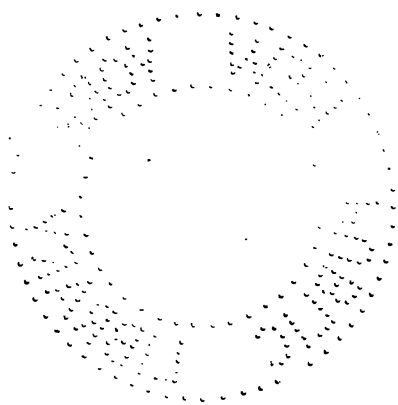
BY

MARY E. LAING

FORMERLY TEACHER OF PSYCHOLOGY AND GENERAL PEDAGOGY
IN THE OSWEGO NORMAL AND TRAINING SCHOOL

REVISED AND ENLARGED

BOSTON, U.S.A.
D. C. HEATH & CO., PUBLISHERS
1908



PREFACE.

So rapid has been the progress in Psychology in the last years, so earnest and all-sided the study of teaching problems, so suggestive the work of Child Study, that much new light has been thrown on the method of presenting the various studies in the school curriculum. Added to this there has been an increased desire on the part of teachers themselves to escape from the deadening effects of mere routine work and to become intelligent students of the problems that confront them in their class-rooms. The language of Psychology is no longer strange to such teachers, since it has penetrated much of the best pedagogical literature; the idea of simple, everyday observation in their own class-room laboratories has grown familiar.

Under these circumstances there is a demand for a more serious and thorough discussion of popular educational questions. Teachers no longer desire to be merely told how to teach a subject, but they choose rather that sound principles of procedure be developed which shall suggest varied and extended application which they are themselves quite able to make.

The reading problem is an unusually complex one. Students of Psychology know that it is by no means solved. But so much new light has been thrown on this most obscure subject that dull and difficult ways in Reading have become illumined.

This book aims to bring together, in a concise form, some of the most valuable and suggestive contributions of later educational thought to the teaching of Reading. It discusses the Psychology underlying the Reading process, and illustrates the discussions with examples drawn from practical teaching work. The Appendix has been prepared with the object of affording material for the use of teachers' classes.

The book is written for pupil teachers, whether they be in city training schools, normal schools, or in their own school-rooms, where they are, perhaps, trying to solve the problems of education single-handed.

PREFACE TO THE ENLARGED EDITION.

THIS book was written nearly ten years ago. During this time Reading has been made the subject of psychological experiment, notably at Columbia University, the University of Wisconsin, and of Pennsylvania, and at some of the German universities. The results of these experiments have been brought together in Chapters XIX. and XX. of this enlarged edition of my book, and the new aspects for reading to which this new material points, in Chapter XXI.

Some valuable material has also been added to the Appendix of this edition.

Much progress has been made in the last ten years both in the making of reading books and in the solution of the reading problem. The schools themselves can do invaluable work in studying the reading process through direct, systematic observation in reading classes, and such study would be a most valuable means of making good teachers of reading.

BOSTON, *April*, 1908.

TABLE OF CONTENTS.

MANUAL OF READING.

CHAPTER I.

LEARNING TO SPEAK.

WHAT is involved in learning to read?

Perhaps we can understand better how to answer this very complex question if we ask ourselves what processes are involved in learning to speak.

When children come to our primary schools they command a spoken language. If you attempt to trace the process by which they have gained a command of this spoken language, you find it something like this: —

As babies they have heard spoken words; i.e. certain auditory sensations were obtained from spoken words, over which the active child-mind busied itself so that perceptions of spoken words were gained. These were auditory perceptions.

Did you ever watch a mother with her child? First, words and songs are simplified, then they are crooned, and sung, and whispered to the child again and again, and always with animation and pleasure. Each little word and sentence is brimful of talk that says what can be said only to a little child, and none of us have studied life far enough to think with any clearness what it means to him.

If the mother show a ball or flower or doll to her child, the name is uttered while the object is being displayed. In this way the auditory perception of the word comes just when the child-mind is busied over the visual image of the object. Now the child is forming perceptions of these objects, and by and by the perceptions of the spoken words are associated with the objects that they represent.

This association of the word and the idea is the beginning of learning to understand, of learning to speak, of learning to read. This association of the word with the object or idea which it names, the simple beginnings of which we have traced, goes on continuously in the child's life, and teachers take up a little later what the mother has begun.

Now a new stage of development is reached in the child's life; the word recalls the idea, and the object or idea, the word. When the child begins to speak, his words stand for ideas. When he comes to the first primary room, he speaks intelligently, because his vocabulary represents his store of concepts, and he speaks for the purpose of saying something.

He already possesses an oral language sufficient for his present needs. He comes to the school to be taught a written language, and the primary teacher who would help him to this written language in the reading lesson must follow nature's method if she would be a successful teacher. She must grow into an intelligent sympathy with the child that will enable her to establish something like real intercourse with him. The written word must come with a real message for his mind and heart. It must have repetitions endless, but with

infinite variety; it must be full of interest for him; hence it must always be associated with the concept, *i.e.* it must from the beginning be a means of expression.

Let us recapitulate here. The child's spoken language is gained: —

(1) By forming concepts of objects.
(2) By forming auditory images of words.
(3) By associating the concept with its appropriate word.

Mastery of this spoken language is attained by constant repetition under the stimulus of interest.[1]

The written language must be obtained —

(1) By forming visual perceptions of words.
(2) By associating the written word and the idea.

This written language can be mastered only by faithful repetitions under the stimulus of interest.

[1] NOTE. — Mastery of a spoken language comes through using it as a means of expression. Fluency and power in using a spoken language means that in oral intercourse ideas find ready expression in appropriate words and idioms.

Mastery of a written language implies that the mind can use it readily and efficiently as a means of grasping thought. Readiness in using a written language as a means of securing a specific kind of thought process is the training that reading gives. *Its worth as an instrument secures its mastery.*

CHAPTER II.

RELATION OF FORM AND CONTENT.

THE mother gives to the child those objects that will appeal to him. She learns by observation the things over which he will most readily busy himself. She assists him to those activities which will arouse and develop his physical and psychical nature. She stimulates these activities by her own sympathetic interest. The child pursues with great persistence and pleasure those things which give an opportunity for free self-expression. *The spontaneous attention which he gives under these conditions of free-activity is the condition under which his clearest ideas are formed.* Healthful response, in the form of activity, both receptive and expressive, is what the mother has secured. She has awakened his interest in the objects and activities toward which his own development inclines him. Without such interest his attention would be fitful and evanescent.

The presentation of subjects to which our children will respond and their presentation in the most fortunate way form two most important aspects of lesson work. For this self-active response is interest, the condition of spontaneous attention, without which education is a sorry matter for both teacher and child.

The perceptive activity of the child does not lend itself readily to the form of either spoken or written

language. If the child listens with attention, the spoken words must say something to him; if he looks attentively, the written words must recall ideas that are interesting to him. *His interest centres in the content.* He masters the language forms because of their essential relation to content. *Interest in content, when it is fairly sustained, is the efficient means in the mastery of language forms.*

The first condition of teaching anything well is the securing of sustained interest with the accompanying habits of attention. The vocabulary of words that the child must master before he can read are forms. They must then be associated with a content that will interest the child.

The observation of children shows that they are interested in humanity and in nature, especially in those aspects of nature that appeal to them as life. The human interest develops first and is most constant and persistent. Child study thus far suggests that children are most interested in children. The child's home is his little world, the only world he has ever explored. From his home his interest leads him out to the world of living animals and plants and the larger world of living, acting men.

He must enter these worlds as a child, — observe them with a child's eyes, respond to them in a child's way. It is noteworthy that the books which have appealed most strongly to children are books that have children in them. This is partly due, no doubt, to the child's interest in the child and partly to the fact that a book which has a child for its centre is more likely to carry with it settings that will interest the child. They

are books that give the child's point of view — Miss Andrew's book "The Seven Little Sisters," and Kipling's "Tomai of the Elephants" and "Mowgli" stories are excellent illustrations of this.

Let us repeat: —

(1) Clear perceptions are gained under a condition of concentration.

(2) Concentration in its best form cannot be secured without the aid of interest.

(3) Children's vital interest centres in content, never in the form of words.

(4) Children are most interested —

a. In humanity and its activities, especially in children.

b. In nature, especially whatever in nature exhibits life and movement.

NOTE. — The child's interest in objects seems to lie chiefly in discovering what they can do, how they behave under various conditions, what use can be made of them, and especially what he himself can do with them.

CHAPTER III.

MATERIAL FOR EARLY READING LESSONS.

MATERIAL for early reading lessons may then be drawn from these two great sources — the humanity source and the nature source. If we can add the human interest to the nature interest, or *vice versa*, so much the better. We find such a relation in literature and in life. The average child cannot study geography under a teacher who knows and loves his subject, without learning to appreciate in some measure the intimate relation between man and his environment; he will learn how surely man has grown strong in overcoming the difficulties of his environment. (See Quiquern in Kipling's Second Jungle Book.) He cannot study history intelligently without learning how the story of whole peoples has been modified by their physical surroundings. All his science study will teach him the dependence of man on nature for supplies, as nature depends on him in turn for "dressing and keeping"; it will lead him later to an appreciation of the important fact that some of humanity's greatest strides in civilization have resulted primarily from harnessing some great natural force. He cannot go far in literature without finding evidences of the poet's love for nature — a love which in many respects is strikingly akin to the child's.

The strong ethical influence of nature study enters into the work from two sides — first, from a realiza-

tion of the laws of life as they are exhibited in nature, or from the receptive side, and second from getting into a right relation with plants and animals, or from the active side. The child who studies the plants in such wise as to come into a vivid realization of the close interdependence of part on part, so that the whole appears to him as it really is, a system of intimately related parts, with each part contributing to all the rest of the plant and receiving something in return from the rest — this child has not only a more scientific conception of plant life, but he has a valuable type illustration which will help him to understand more complex organic relations as he finds them, whether exhibited in plant or animal form, in a continental structure or a social organization. The child who is taught to feel that the animal which has been removed from its environment for study must be honestly cared for, and its needs faithfully attended to, is not only acquiring a habit that will be likely to lead to more painstaking observation, but he is learning a rational and honorable guardianship of life, which is one of the important attributes of moral character. The child should destroy the fewest possible seedlings in studying them; he should plant no seed without being taught to care for it. For nowhere do we touch life without incurring responsibility. To learn this would be invaluable to any child. Nature study should teach it.

In choosing material for nature work we must be guided by three principles: —

(1) The fundamental life relation which unites humanity to nature must be exhibited.

(2) Material must be chosen from grade to grade that will give an orderly sequence which will serve as a foundation for future science study.
(3) The work must be adapted to the experiences of the class itself.

The first condition has already been alluded to from the standpoint of interest. From the standpoint of a correct education it is all-important that the child should reach a true conception of fundamental life conditions.

True ideas of nature naturally lead to right action toward objects of nature. In one of the large cities of the northwest the boys were wont to disturb the birds' nests and stone their occupants. In vain did the teachers remonstrate. A study of birds was begun a little later, and Longfellow's "Birds of Killingworth" was read. From that time the war against the birds ceased, without a word or suggestion from the teachers.

Another condition which must govern the choice of material in all nature work is its adaptability to the particular needs of the children themselves. Young children should be given material that impresses them as having life. Growth and movement are the two attributes that appeal most strongly to children. From the plant world choose living, growing plants, and have the children care for them. From the animal world select animals that come close to their lives. Again, let types be chosen; *e.g.* if, in a series of lessons where material is taken from the garden, a monocotyledonous plant is chosen for study in one grade, let a dicotyledonous plant follow. In material drawn from the zoo-

logical field, if the grasshopper is studied in one grade, choose another type insect for subsequent study. In this way the child is laying an orderly foundation on which subsequent work can build.

The very first lessons in reading may well be drawn from nature study, since these lessons lend themselves more readily to the child's limited vocabulary of written words, and give better opportunity for the foundation of clear sense images.

As soon as possible material drawn from literature should be introduced. Stories from Folk-Lore, Fairy Tales, Rhymes, and Legends that have become children's classics should find their place in the reading hour. The range of this material widens so rapidly that, like Philip Gilbert Hamerton's good reader, the secret of successful choice is in knowing how to skip judiciously.

The bridge to this class of material is most naturally made from the nature side, where a yearly sequence is followed, through the interest that develops in special holidays, or in poems relating to those objects in nature that form the subjects of study; or the transition may begin through the study of Indians or Esquimaux, or in some other way. In the choice of material follow the child's growing interest. In this way a true literary taste is developed more surely, and the difficulties of mastering a written language more readily overcome.

The child's environment must always modify the matter of his early reading lessons. The child in one of our larger cities or towns, who has had a limited experience with nature, should have many lessons drawn from the social world in which he lives. Meanwhile

no effort should be spared to let nature into the schoolroom. The street-car driver, the drayman, the milkman, the stone-cutter, the mason, and builder — all the activities and industries about the child should be utilized as material for the reading lesson. This industrial side, with its life and movement, will interest the children. Back of the industrial side the child should be helped to a growing understanding of social life. He should think of these laborers, not only in their service to society in general, but in their service to their own homes in particular.

No better starting-point could be made in the early language lessons than the industries of the children's own parents. Such work has the advantage of a vital relation to the child's own life, and presents valuable points of departure leading to wider fields in history and literature, in science and geography. When nature work is introduced after such a beginning, it should be approached from the social side. The homes of animals, their manner of obtaining food, their care of their young, etc., should be presented in such a way that the child's own social experiences will help him in their interpretation. But some real experience with plants and animals must precede any nature study whatever, and, as has been suggested, such experience should teach the children the care and protection of living things.[1]

[1] The writer once saw a most valuable and suggestive exercise in the Practice School at Jena. The teacher of the beginning class, instead of starting at once with the full programme of work, reserved periods in the first days for ascertaining the experiences of the class, and the variety and accuracy of their ideas of everyday objects.

All this suggests that the teacher should study the environment of her class, and that the results of such study should modify the early lessons in reading. Special care should be exercised that these early lessons show definite plan and continuity. The first primers and readers should be chosen with an idea of carrying forward these *living* beginnings.

To recapitulate: —

(1) Material for reading should be chosen from literature and nature study.
(2) Nature and humanity are closely related. Appreciation of this relation contributes directly to interest, intelligence, and character.
(3) Material chosen must be adapted to the child's stage of development.
(4) Types should be chosen.
(5) Procedure should develop an orderly sequence from grade to grade.

The results showed that the children, although they represented the same social class and lived in the same neighborhood, varied widely in their sense knowledge. Apparently these differences arose from the habits of their respective families. The children who had shared the walks and excursions of their parents had an intelligent understanding of the world about them, and an accuracy of sense images not frequently shown by those children who had explored the region in a more accidental and haphazard way.

It was noticeable that these children exhibited the liveliest interest in each other's experiences, and a natural and spontaneous interchange of thought grew apace. When the work was completed the teacher had formed a clear impression of the amount, variety, and accuracy of the sense images of his class, and the class themselves had come to feel at home in their new environment, and to know each other. A social life was established.

(6) Literary material should be taken from children's classics.

(7) The earliest lessons should be modified by the child's environment.

(8) Teachers should, at the beginning of the work, acquaint themselves with the children's stock of sense experiences.

NOTE. — Valuable series of early lessons may be drawn from the children's industrial life at school, whether it be gardening, weaving, or modeling. The child's own activities afford the very best start in interesting him in the activities of primitive children of other peoples, or of the world around him.

Reproduction of interesting facts in books which the children are reading with their teacher, the favorite Mother Goose Rhymes, and later the Fairy Story may be used as material in early reading lessons.

Stories of primitive life, especially when grouped about a central child character, are valuable material. Any one of Miss Andrews' books would afford several attractive series.

In working with this class of material the fact that one is in an historical field should not be overlooked. Material should be chosen which will afford true impressions of the life, the habits, the interests and activities of the native child who is the central figure of the series of stories.

The tenacious memories of children will hold the details of such work, and they should be drawn from authentic sources.

CHAPTER IV.

TREATMENT OF MATERIAL (SCIENCE).

THE reading lesson should be closely related to the nature lesson which it should supplement rather than reproduce. Points of interest developed in nature study should be followed out in the reading hour. When this is not done, the children should have opportunity in the reading lesson itself for the observation of objects about which they are to read. Such observation is not reading, but it should provide the children with clear sense images, without which reading in the true sense is impossible.

In the first grade early lessons should be written on the board in the presence of the class, the children and teacher making their own lessons. Such work should be continued in diminishing amount through the primary grades. This method closely unites practice in writing and spelling with reading.

If we ask what gives power and grasp in reading, we shall find that it comes from : —

Power to concentrate.
Power to understand the content.
Power to make the content real and vivid.
Power to grasp thought in its entirety.
Power to subordinate in relation to the central thought, that is, to get true proportion.

Power to read is indeed the first great condition in education and the primary end of early teaching.

We must remember, with Froebel, that all great things have very simple beginnings, and that these beginnings largely determine the final outcome. If, then, this power and grasp in reading is to be present in our high schools, it must find a beginning in the lowest primary class.

The board lesson is one of the surest means of making that fortunate beginning which will lead directly to a cultivation of the power that reading should develop. The reasons for this lie in the following facts: —

The board lesson represents a thoroughly mastered content, so that words are taught in relation to ideas.

The board lesson gives opportunity for the best possible concentration of attention, hence for the more thorough and rapid mastery of language forms.

The board lesson affords a natural transition to the printed slips that may also represent the work of teacher and class. Such a transition tends to make the child appreciate book-making. It makes the book a natural and familiar thing, and prepares him to use it with more interest and understanding.

We have suggested that material drawn from the natural science field should be treated so as to give the beginning of a scientific training. This requires that children be led to exercise their perceptive activities over material, make thoughtful inferences, reason from cause to effect, and *vice versa*, and base all conclusions on known facts. It requires, too, that children express

all observations and conclusions in simple, direct, truthful language.

These requirements in method suggest the following order of work with material : —

(1) Careful perceptive activity over that which is presented to the eye.
(2) Careful interpretation of that which is observed.
(3) Natural and accurate expression.

The teacher, whose class is studying the young bean plant, should see that children observe accurately the size of the cotyledons at various stages. By means of comparison they reach the fact that the cotyledons are diminishing, shrinking up. Meanwhile, there is a related set of facts which they are observing. The young plant is growing larger while the cotyledons are growing smaller. They must look for the cause of this. With a few young bean plants developed in moist cotton, they will discover that the baby plant is using up material encased in the cotyledons, which are the bean plant's little storehouses.

Always see that the child makes his own observations and, as far as possible, his own inferences, guarding carefully against the pernicious habit of guessing.

It is a mistake to think that *all* material must be brought into the schoolroom, though much of it should be brought there. When the children are studying the rabbit it will greatly enhance the value of the work if the animal can live in the schoolroom a few days, becoming an object of regulated and natural care as well as an object of observation. Fishes, polywogs, crayfish, etc., may be kept as long as is consistent with their

welfare, and should then faithfully be returned to their native haunts. In no other way can children make observations so accurately, and acquire so sure an interest in the habits and movements of the animal, and with the work their own respectful consideration for all life will constantly grow.

It is a mistake, however, to confine all work to description. Field lessons should begin at once. Material for subsequent lessons should be gathered during excursions, and will naturally grow out of the points of greatest interest;[1] *e.g.* the children who have observed their first dandelion with the teacher, and have left it to gladden other eyes, may still use this as material. The teacher helping the children to recall the chief points of interest and to give expression to them in the form of a reading lesson, secures something like the following: —

Our First Dandelion.

To-day we found our first dandelion.
It was growing close to the sidewalk.
There was green grass all around.
It was in a sunny place.
We think that the dandelion loves the sunshine.
We did not pick the dandelion.
Many people will see it.
It will say to them, "Spring is here!"

[1] A kindergartner recently related this little incident. "Miss R. was walking with a little group of children when they discovered their first dandelion. The first impulse was to pick it, but some one suggested that if it were left there, other people could see it. At that they all gathered round and worshipped it." This little incident right out of everyday child life suggests that "having" even in nature study, is not always best possession.

Much of the success of the work will depend on the teacher's skill in directing the activity of the children both in seeing and saying. She will help the children to discover in their field walks the conditions under which the flower is growing, its habits will be observed while she will be careful to awaken no mere sentiment for the flower, but simply enter into the child's natural feelings for it. The teacher must direct the natural expression of the class, in the subsequent reading and language lesson by questions and suggestions; *e.g.*, Where did we find the dandelion growing? (writing the children's answers on the board in "the story" which they are making together). Why did we think the dandelion liked this place? Why did we decide to leave it? What will it say to people? etc.

Remember that definiteness must characterize all work in directing the child's thoughts. He will lose all interest in seeing if he is left in doubt as to the direction that his activity is to take.

It should be remembered here that much of the reading work drawn from nature study has failed because the reading lesson has been made a means of merely repeating the nature lesson, or of pronouncing the written language lesson drawn from the nature work. The reading lesson should as a rule, hold something new for the child. The truths learned in the nature study may, and must, reappear in the subsequent reading lesson, but they should be seen from a new angle. If a child already knows the exact content of his reading exercise, there is no opportunity left for self-activity over that content, hence interest diminishes and a habit of mere word pronunciation is induced.

The reading lesson should be made a means of adding the element of imagery and life that should always follow accurate perceptive activity. Personification is a natural method of expressing such imagery. Also in such lessons the human interest may be appealed to, and the true relation between child and nature taught. Admirable review lessons can also be given that quicken the child's knowledge and increase the accuracy of his ideas. (See Appendix I., especially the work in review, p. 135.) In such a procedure, reading becomes truly supplementary of nature work.

Because of the character of the child's imagination, personification becomes the child's natural form of expression. Children readily fall into this method of making their stories. The slightest initiative will induce this form of expression, *e.g.*, What would the dandelion say to us if it could talk? Let us ask it where it lives. From this most animated form of language, good reading most naturally grows. Its very animation stimulates thought, makes expression natural, and awakens a more lively appreciation of content.

I am a dandelion.
My home is in the green grass.
I like sunny places best.
I look like a star in the grass.
I am sun color.
I say to the people, "Spring has come!"

To summarize: —

(1) Material for first reading lessons should be drawn from nature study.
(2) These first lessons should be written on the board.

(3) The reading lesson should be preceded by a nature lesson in the schoolroom or a field lesson.

(4) In these nature lessons the children should be trained to make their own observations.

(5) These observations expressed in simple natural language should make the reading lesson.

(6) These subsequent reading lessons should supplement the nature study, but they should never be a mere repetition of it.

(7) In all this work, children should be clearly and simply directed.

NOTE. — See Appendix I (*A*) and I (*B*).

CHAPTER V.

ANALYSIS OF LESSONS (SCIENCE).

INTEREST in the object itself must develop before there can be great interest in reading about the object. As we have seen, the science lesson proper should not be the reading lesson, but the reading lesson should grow out of it. Science primers should in every case succeed the study of the objects which they describe; only so is an intelligent interest possible. Let us look at the first two or three lessons in such a primer and ask ourselves about the work that should have preceded them.

I am a little baby bean.
I am white.
I am round and smooth.
Little Nell put me to bed in the earth.
I like the soft warm earth.
It is my blanket.
My blanket covers me all up.
The sun loves me.
He makes my bed warm.
The rain loves me.
It gives me water to drink.
I love the good rain.
Little Nell loves me.
She will let no one hurt me.

(3) The reading lesson should be preceded by a nature lesson in the schoolroom or a field lesson.

(4) In these nature lessons the children should be trained to make their own observations.

(5) These observations expressed in simple natural language should make the reading lesson.

(6) These subsequent reading lessons should supplement the nature study, but they should never be a mere repetition of it.

(7) In all this work, children should be clearly and simply directed.

NOTE. — See Appendix I (*A*) and I (*B*).

CHAPTER V.

ANALYSIS OF LESSONS (SCIENCE).

INTEREST in the object itself must develop before there can be great interest in reading about the object. As we have seen, the science lesson proper should not be the reading lesson, but the reading lesson should grow out of it. Science primers should in every case succeed the study of the objects which they describe; only so is an intelligent interest possible. Let us look at the first two or three lessons in such a primer and ask ourselves about the work that should have preceded them.

I am a little baby bean.
I am white.
I am round and smooth.
Little Nell put me to bed in the earth.
I like the soft warm earth.
It is my blanket.
My blanket covers me all up.
The sun loves me.
He makes my bed warm.
The rain loves me.
It gives me water to drink.
I love the good rain.
Little Nell loves me.
She will let no one hurt me.

I love little Nell.
I shall go to sleep now.
Soon the sun and the rain will wake me.
Do you know what I shall do then?

(For remaining lessons of series, see Appendix I.)

It is evident, first of all, that the study of the bean plant, from seed to seed, should precede the reading of this book. Next, there should be a series of board lessons in reading growing out of such study, so that children will master a fair vocabulary of words along this line. They are then ready to enjoy the book.

There are some pleasant features in the science study itself suggested by this little primer: —

(1) The children are evidently supposed to have made their own observations.

(2) The sequence is followed through a complete series, so that the close interrelation between parts becomes clear. The whole is seen as an unfolding life, and the bean plant itself as a completely organized system of forces, in close relation, and working in complete harmony. This biological aspect of the study is calculated to interest children because they feel that real life is present.

(3) The most important ethical value of the work enters with this study of life, and one of the most pleasing features of this lesson series is seen in its strong ethical force. This arises in part because of the care-taking relation between the child (who is one of the bean plant's friends) and the bean. But it is much

more plainly shown in the clear exhibition of the function and use of the various parts, so that the fact that each is working for all and all for each is clearly shown. This, as has been said, is one of the most important truths that science has to teach the child.

(4) This conception of the intimate relation between life forces must grow slowly in the child mind, exhibited first in the study of animals in relation to their environment, later in the study that shows the relation between the continental structure and the continental life in geography. Such relations may be alluded to by the teacher in opportune moments, but should never be moralized over. Teaching should make them prominent; these great truths held before the eyes constantly, now in one aspect, now in another, become at last a part of the child's everyday thought. Ethical and religious truth may thus become a means of helping the child to realize his own ethical nature.

(5) The forces outside the bean plant, on which it depends for the quickening of its own life, are clearly shown in this series of lessons. Sunshine, rain, and earth — each in its own way is loving and helpful.

(6) The personification throughout is only a natural expression of all that the child feels here as life. Indeed, it may be seriously questioned if these agencies could be properly represented to his mind in any other form.

This simple series of lessons is home-made, the work of teachers who a few days before the writing would have said, "We cannot possibly write lessons for children or make reading lessons with children," and who succeeded in doing the thing they "could not" because they were trying, not to make a book, but rather to adapt science to the minds of children. It is only another illustration of the great truth, that when we begin truly to "live with our children" we shall learn to do for them all that we need to do. One of the most important suggestions of this little primer for young teachers is to help them feel that they too can do this work.

There is no doubt that the most beautiful reading books are unprinted. They are the living books made by teachers and children in their daily work, and as they grow out of real life and express live interests, they have power to inspire interest in others. The printed slips, the children's own work or their teacher's, easily become little home-made books. Such work puts the child from the beginning into another relation to the book. It is nearer him. He has a simpler and truer notion of how books come to be: he can use them more intelligently.

Children should make their own drawings from the object in nature work. This is the very best means of securing an accurate sense image of that object. "A pencil is the best of eyes," said Agassiz. The pencil has wonderful power in increasing our general perceptive insight. The child who has made his own drawing from life will appreciate the illustrations of the book as no other child can.

All work in drawing, coloring, free paper-cutting, and modelling is a true adjunct of the reading work, since it constantly sharpens the child's visual and tactile senses, and adds accuracy to all his perceptions of form and color. Moreover, such work is preparing him for an intelligent use of the picture and for a more pleasurable and profitable reading of the written description.

But the picture should not supersede the object. For the beginning with concrete material helps the child afterward properly to interpret the picture. (See chapter on The Picture and its Use.) In all work, see that perceptive activity is alert, for general and superficial seeing must be superseded by special and definite seeing; general and sentimental emotion must be superseded by simple, true feeling.

CHAPTER VI.

APPERCEPTION AND READING.

The Water Drops.

SOME little drops of water,
Whose home was in the sea,
To go upon a journey
Once happened to agree.

A cloud they had for carriage,
They drove a playful breeze,
And over town and country,
They rode along at ease.

But oh! they were so many,
At last the carriage broke,
And to the ground came tumbling
These frightened little folk.

And through the moss and grasses
They were compelled to roam,
Until a brooklet found them
And carried them safe home.

When would you read a selection like this with your class? To many a second grade class it would be an obscure story. The class that knew nothing of evapo-

ration, formation of clouds, rainfall, and brook life would find it incomprehensible. But children who have just finished the simple study of evaporation and rainfall, of clouds and brook basins, that make the beginning and foundation for so much of our geography work, would find in this selection a rare treasure.

We have seen that the child reads what he grasps. Let us now state that he grasps what he apperceives or understands.

All concepts, all ideas that are of any worth to us, are active forces. They do not reënter consciousness when we ask for them merely, but they often assume clearness in response to that condition of consciousness which calls them up. The child reared in a city home with a globe of goldfish among its furnishings, needs no one to tell him that he is looking at fish, the first time he finds his way to a pebbly stream and watches the minnows dart about or the brook trout make their excursions through the shady pools. He knows that they are fish by virtue of the fact that he possesses the old concept of goldfish. He interprets the new by means of the old concept. The new sense perception of minnow or trout recalls the old concept of goldfish to consciousness, and the process of comparison and interpretation goes on, with the result that the child understands what he sees. The process goes on very rapidly if the child's mind is at its best, and if both sets of concepts are clear, the process is then attended with great pleasure.

The old concepts of goldfish are the apperceiving or interpreting concepts, the new concepts the interpreted or apperceived, and the whole process apperception.

The important things for us to note are : —

(1) The old concept is recalled by means of the related new.

(2) The new is the object of concentration.

(3) The process is one of comparison of the new with the old.

(4) The finished process leaves the new understood.

(5) At the close of the process the new is associated with the old.

(6) The child's activity is at once spontaneous, fruitful, and pleasurable.

When the child has looked at the fish for a few moments and goes away to tell some one that he has seen some fish that are not goldfish, or that he has seen some little brown fish, it is with the sense that he has acquired a new possession. From now on, when he recalls his concept of goldfish these other concepts will come, or *vice versa*. The new is assimilated with the related old. It has found its right place with other stores. From now on it is a living concept power. And whether this particular concept group grows to no greater wealth than it has with most of us, who know the fish because we eat them, or whether it becomes as rich and complex as that of an Agassiz, the fact remains that all subsequent additions to that particular group of ideas must take place in this way.

Apperception is the condition of knowing. It is the most important condition of interest. Its study makes one of the most helpful chapters of Psychology for the teacher. Without endeavoring to add to the treatises on

Apperception already written,[1] let us content ourselves with noting a few facts that are of especial import to reading.

The first fact is this: If the right apperceiving ideas are present in the mind, the process of apperception will go on without further care. When these ideas are present, the child feels what is really true — that he is finding out the new for himself, hence a heightened sense of acquisition, of power, which gives genuine and helpful pleasure.

Again: Under this normal process the new becomes the sole object of conscious attention, hence the resulting product is sharp and clear. The teacher who explains this poem on "The Water Drops" while its presentation is in progress, is simply pushing in new apperceiving ideas, along with the ideas contained in the poem itself. This doubles the work by giving two series of ideas at the same time, and since one of these the pupils must apperceive before they can understand the other, concentration becomes impossible and the whole process is confused. Who of us does not remember the dazed condition of mind in which he found himself in the old school days, after one of these so-called explanations? The truth is, we must explain the new before we teach it, paradoxical as it may sound, and only so can we hope to teach it successfully.

Not all apperceiving ideas are of equal value. A little thought makes it very clear that the old must be related to the new along vital lines. The teacher who

[1] See Lange's "Apperception," published by D. C. Heath & Co., and "A Pot of Green Feathers," published by Charles Bardeen, Syracuse, New York.

thoroughly teaches the brook basin of his own neighborhood has helped his children to form a complex concept that will be more important in helping them to interpret larger streams and rivers than any other that they could possibly form. You may increase facts about the length of the Rhine, its forests, its castles, its vineyards — but, after all, the Rhine is a river, and it is most important that the child see its great slopes, appreciate its great basin and structural relation to the continent. Minor ideas of forests, vine-clad hills, far-reaching plain, of city, castle, and cathedral, may be added, until the whole is rich in detail, but it is most important to have the simple, fundamental, structural ideas true, for details can be true only superficially if the proper apperception of the fundamental is faulty or wanting altogether.

This leads us to a related fact. The character of the apperception determines the quality of the interest. The class who see the great Rhine basin as a part of the structural life of the continental land mass will come to the description of the Black Forest and upper Rhine, to the pictures of vineyard and castle and cathedral with a more sustained interest and a more intelligent appreciation, than a class could possibly possess who are adding these details to an imperfect foundation.

We should remember that the principles on which such work rests are no invention of physiography or modern psychology or Herbartian pedagogy. They are based on the laws of mind, and could have been learned long ago by an observation of mind, as is evidenced by Cæsar's method of apperceiving Western

Europe illustrated in the first chapter of the first book of his Gallic War.

The continuity of well-arranged subject-matter gives these fundamental apperceiving ideas in excellent sequence, so that one thing prepares for another. But what has this to do with the reading class, where continuity is the exception and not the rule, where children read a new "piece" each day, and where "pieces" rarely fit in with each other or with anything else in the daily programme?

You answer, By making the work in reading relate to that of other studies, drawing the material now from science, now from geography, now from story work, where apperceiving ideas have already been furnished, we shall lay the proper apperceptive basis. Such supplementary reading should undoubtedly form an important part of the material for the reading lesson, but we should remember that reading must form the literary habit. The literary habit is not well formed if the reading becomes superficially discursive, and if the child fails to gain the power of grasping selections in their continuity. This power can never be well developed by the use of "pieces," or by the excessive use of short selections. Our classes must be given many whole texts where continuity of thought is sustained.

Said an enthusiastic teacher of reading in the third grade: "My class have read nothing in the half year that they enjoyed as they did the 'Snow Queen.' They read it all in one week!" An investigation of conditions showed the following facts: The "Snow Queen," by Hans Andersen, is a fairy story with a rich ethical content. A mirror in the hands of a wicked sprite had

the power of making everything reflected in it look ugly. At last it went to pieces, and some of its many tiny splinters which were floating in the air, settled into the eyes and heart of a little boy named Kay, who at once became very bright and very disagreeable. At last he came under the influence of the Snow Queen whose kiss froze his heart and made him forget his home and his little play-fellow Gerda. Lonely little Gerda whispers to the sunbeams and roses that Kay is dead, but they answer, "We do not believe it." At last she does not believe it herself. Then she goes to look for Kay, and after long wandering, in which she is helped by flowers and beasts and birds, she reaches the ice palace of the Snow Queen away in the north. There she finds Kay. Her kiss melts away the ice from his frozen heart, his tears wash out the ugly splinters, and together they return home.

Here are some facts worth noting : —

This class accomplished at least one-third more work in this single week than in any other week in the term. They enjoyed this story most, and they read it better. Why ? First, the selection was exceedingly well adapted to their stage of development. Again, each lesson was a preparation for the succeeding one, *i.e.* the ideas gained in one lesson became the apperceiving ideas for the next. This fact provided for a crescendo of interest. Because of all this, concentration of a better quality was obtained, and obtained more easily than in the reading of "pieces" where concentrations cannot support one another. Work became more spontaneous from day to day, as interest increased, so that a maximum of work was accomplished with a mimimum of labor.

It takes more training and a richer stock of ideas to interpret a fragment of a Greek statue, an arm, or torso, than the Venus of Milo, and this Venus could be more readily interpreted were the arms present in their original position. It takes a better equipped mind to interpret an isolated act from "Henry VIII." than the whole play. The truth is, that the single act can be rightly interpreted in no other way than by relating it to the whole. Do we not, when we fill our reading with fragments cut from artistic wholes, spoil the child's power of seeing things in due relation by placing him under conditions where such interpretation is impossible?

The law of apperception demands that we select no "pieces" for our reading lessons unless the whole is being presented by some other study, and unless this part has a direct articulation with that whole. A whole may be brief enough to be grasped in a single lesson, or it may be indefinitely long. Increased power and impetus are gained in the longer selection.

Then wholes must be treated as wholes, *i.e.* parts should be seen in relation to each other, and the child's mind prepared for the efficient apprehension of the fundamental thought. The child's power of apperceiving the whole is measured by his power of grasping the central thought.

CHAPTER VII.

CORRELATION OF READING WITH OTHER STUDIES.

CORRELATION of reading with other studies has been implied thus far in this discussion.

Correlation of studies is a subject which has been so fully discussed that its value can well be taken for granted here. The teacher who relates reading, writing, spelling, and language with science has long since learned that there is not only a large resulting gain in the saving of time and energy, but she has learned that the work is actually better done. The science lesson carried forward to accurate oral and written expression is more thoroughly taught, and no language work is so effective as that which grows directly from the matter in which the child is interested. Reading as well as language receives its dynamic force from such a relation. Spelling and writing, as right habits, can be learned only by practice.

This may be called the formal side of correlation, but there is another side of greater worth.

Psychology teaches us that concepts or ideas should not only be well formed, but they must be associated with related concepts. The teacher who secures interest in her course of lessons upon the dragon-fly will insure vividness to the concepts which the children are forming. If there is sharp observation during the course of the work, their ideas not only gain in clearness, so

that the children are not merely able to distinguish the dragon-fly from related insects, but their ideas have gained in definiteness, and the child has a clear concept of the structure of the head, of the thorax and its attachments, and of the abdomen. Analysis has given clearness to each part and distinctness to the whole. Continuity in the work gives a group of closely associated ideas — a well-articulated concept group.

Let the teacher use comparison throughout the work, leading the children to compare the dragon-fly and some other closely related insect which they have studied thoroughly, *e.g.* the beetle. The result will be the close association of these two well-articulated concept groups. Both groups gain by the association itself, while the comparison, as it proceeds, does not merely form these associations but it gives clearer, sharper distinctions to the concepts compared.

Such work continued throughout education would result in the intimate association of ideas relating to geography with those relating to mineralogy, to physics, to history, etc. It would result in the relation of history not only to certain features in society about us and to events chronicled in periodicals, but to literature, to art, etc. It would help in the recognition of historic material wherever met with, and in its use as historic material. Intimate relations would be seen existing between the parts of knowledge. Clear associations will have been established between concept groups, between concept masses. Knowledge would be characterized by breadth, close articulation, system, vigor. The whole circle of thought would be unified.

Such work results in the concentration of the individ-

ual's power. Concentration as a principle in pedagogy is based on the great fact that "unity is power" in the life of a man as well as in the life of a state. The correlation of studies is but one means to this great end. A method which carefully compares and associates that which is in vital relation is another means.

Correlation, then, if it be genuine, does not merely relate subjects carefully in the course of study and in the daily programme so that they naturally assist one another as apperceiving forces, but it seeks to bring about definite results in the mind of the child. It does this by a careful study of his needs and a continuous adaptation of the procedure to these needs. It relies on method as well as arrangement of matter, and above all it remembers that the real work of correlating and unifying must be done in the active minds of the children themselves.

Let us examine a third grade lesson, presumably written by some child as the result of certain observation in science work, and possibly printed afterward on slips to be used as material for the reading class.

How My Corn Plant Grows.

Two weeks ago my corn plant measured three inches from the ground to the tip of the tallest blade. One week ago it measured four and one-fourth inches, so that it gained one and one-fourth inches in a week.

To-day it measures six inches from the ground to the tip of the tallest blade, so that this week it has gained one and three-fourths inches. This is one-half inch better than last week.

We have had a warm bright sun during the past week. There were two cloudy and cold days the week before. To-day the sun is so warm that the earth feels warm about the corn plant when I touch it.

The leaves have grown dark green and look strong. Miss Brown says it is a fine plant! George forgot to water his plant for three days. During that time it grew but one-eighth of an inch. The girth of my plant is about one-fourth of an inch.

To-day we learned to say — "First the blade, then the ear, then the full corn in the ear."

This child has made drawings of his corn plant in various stages, and will continue to make such drawings. The class will read together "Blessing the Cornfields," from Longfellow's "Songs of Hiawatha," and they will have a short series of history lessons on "The First Corn Planting in New England."

If we ask ourselves what subjects have been related here, we shall find that we have not only the formal and necessary relation of science and language, writing and spelling, but also of drawing, number, history, and literature.

Let us go a step farther and ask why each has been introduced. Drawings have helped to sharpen observation. We must perceive the object before we can reproduce it in drawing, and we must perceive it accurately if our drawing tells the truth, hence drawing has been made the means of obtaining an accurate concept of the plant in its various stages. Why is number introduced here? Evidently for the purpose of making observations exact. It is not enough for me to see that my plant has grown little and my neighbor's much, but I

must ascertain, if possible, *how much* more that other plant has grown; last of all, I must ascertain the cause of this difference in growth between the plants, or in the same plant during different periods. This is good science work, and arithmetic has helped to make it accurate.

But why relate the work to literature? In order that the children may learn the value of corn to man and learn it in connection with the part that it has played on this continent in the earlier history of the Indians. But above all, a true poet teaches them here, hence the ethical significance of the whole is felt more truly and more vividly. When they have learned to think of this plant as one of the good gifts of the Great Spirit to man, they turn to our own history and are ready to appreciate the significance of the corn plant to the early settlers of New England.

One has only to ask himself the effect of all this in the form of a stimulated interest, of a developed intelligence and sympathy, of a real education, to feel the vast gains made by associating these subjects. The effect in concept life will be felt afterward in geography work when the products of some of our western states are in review; indeed, the whole significance of national products to national life will be more clearly apprehended, more vigorously apperceived. The child who has worked in this way gains sharper perceptions and truer power in interpretation, both in literature and in history.

Science work, if it be of value, leads to correct habits in the observation and interpretation of nature. This work on the corn plant measured as science is attaining

this end, and is doing so more surely because of the aid of other studies. Looked at objectively, every separate subject has gained by the correlation; looked at subjectively, the child has gained because of the vital associations of related concepts, and because of the resulting wholesome stimulation of his own psychical life. All this suggests that if the parts of knowledge are to possess real significance, they must be seen in their relation; it suggests that one cannot indeed understand anything comprehensively without associating it with all vitally related things.

When shall we relate arithmetic and drawing? When they can be made efficient in giving sharpness and accuracy to ideas. When literature and history? When they bear an intimate and valuable relation to the subject in hand. Remember to choose wisely the subjects of correlation, to introduce them at the right time and in the right way, so that definite and valuable returns may result in ideas and lively interest, and then reading will be truly the handmaid of the other studies in school.

NOTE. — For further discussion and illustration see Appendix I (*A*), I (*B*), and I (*C*).

CHAPTER VIII.

METHOD IN READING.

READING is a process of thinking. Any method of teaching reading must be modified by the character of the thinking process. Any scientific method of teaching reading must not only be in harmony with this particular thinking process, but it must be calculated to promote that process in the most fortunate way and direct it to definite ends.

Before any intelligent discussion of a method in reading is possible, it is necessary to distinguish between that activity which must be put forth in the mastery of a written or printed vocabulary and that which makes up the reading process proper. The activity of accurately learning the form of a word is unlike that put forth in recalling and relating concepts under the functioning of written words. Only the latter is reading.

The ease and success of reading must always be measured —

(1) By the possession of accurate visual images of words,

(2) By the possession of vivid concepts associated with these words,

(3) By power in uniting concepts or ideas into definite thoughts.

The best means of securing such mastery of words must always remain an important feature of the work of learning to read, but mere word drills must be sharply separated from reading proper or confusion results.

There are four so-called methods of teaching reading that are each worthy of thoughtful attention.

A. *The Phonic Method.*—This deals essentially with the mastery of words, and like the old alphabet method is not a method in reading proper. In the phonic method words are analyzed into sounds, and each sound is associated with its proper character. There is a carefully graded procedure through the various vowel and consonant sounds — children learning the diacritical marks which distinguish the various sounds, as the work proceeds. Power to help himself to the new word is gained by the child, and great skill and power in the recognition of new words is often acquired in the first year by this method. The opponents of the phonic system claim that, while progress is apparently more rapid in the early years, results do not persist.

Skilful teachers who use this device are careful to separate the phonic drill from reading proper, making the phonic exercise a mere gymnastic which aims to sharpen perception for words and sounds. That this is not a method in reading cannot be too strongly emphasized.

B. *The Word Method.* — The word is an object sharply individualized — an object that must be analyzed and recognized as an individual. The mastery of the word which is presented first as a whole and recognized first as a whole, is the aim of the so-called word method. This method aims at the sharp imaging

of words so that recognition is faultless and reproduction accurate. This method groups closely related words, and has been further developed by the Ward system which has thoroughly analyzed and classified the words of the language and planned a carefully graded procedure in word mastery. It should be remarked that this method does not deal with the reading process: it aims primarily at word mastery.

C. *The Sentence Method.* — The sentence is the expression of a thought. It is the unit of language. The sentence method presents the sentence as a whole to beginners. This is recognized as a whole and afterward analyzed into words. There is a carefully graded procedure, those sentence forms being selected first that promise the most interesting reading for the child with the introduction of the fewest possible new words. Care is taken to develop the "sentence sense" — the power of accurate and fairly rapid sentence grasp.

It will be seen that the word and sentence methods are closely united, in that the teachers who employ the latter make the thorough mastery of the word an important feature of the work. Such teachers claim that this method induces right habits in reading, since it makes it possible for the work of thought grasp to begin at once. Spontaneous interest is thus made possible, while much of the work of word mastery goes on unconsciously through the repetition of the old vocabulary in new relations.

D. *The Concentration Method.* — This is based on a principle that lies at the basis of all teaching.

The field of vision gives us a varying number of objects representing varying degrees of clearness, the

clearest being in the centre of the field, while the remaining objects diminish in clearness according to their distance from the centre.

This law operating in the field of vision arises from the structure of the eye, but it is controlled by the operation of the mind. We focus our eyes on the object which we wish to see, and so bring it into the centre of the field of vision, and give it the greatest possible degree of clearness. This increases the sharpness of the impression gained, and adds distinctness to the resulting sense perception.

Attention is a mental focussing. It is the mind that sees. When one desires to see an object lying in the range of vision, the eye simply aids the mind, and the result is the focussing of consciousness, which gives sharp outline to the object of attention. The process is similar in attention, whether senses are active or not: always there is a narrowing or focussing of consciousness on the object of thought so that clearness results. This simple law controls all productive mental activity. In whatever way the child's mind is active, the clearness of the resulting images or ideas will be measured by the quality of the attention given the object. There is absolutely no comparison between the results gained from a few seconds of activity where there is a complete focussing of consciousness on the object of thought, and those arising from many, many minutes, or even hours of partial concentration.

The concentration method recognizes the above principle. It secures attention through interest. It recognizes that interest centres in content, never in form; it therefore chooses for the reading work material

drawn from "central subjects" in which the child is vitally interested. It depends on the vital force of a simple and genuine interest for the overcoming of formal difficulties in reading as well as for inducing that thought process which is reading. Its categorical imperatives are: —

(1) Everything with attention.
(2) Interest the condition of attention.
(3) Right content rightly mastered, the condition of interest.

This method has led to some of the most charming and wholesome devices in reading work, and has done much toward helping us to teach reading.[1]

The concentration method does not stop with devices that are calculated to fasten the child's attention on the word, the visual image of which is to be formed, it both secures sharp sense images and also aims to put the child in possession of a store of clear, animated sense concepts, as well as of visual and auditory word images. In the reading process proper it asks that the mental energy should be focussed on the thought process proper.

Whether we prepare for work in the primary class by teaching a limited vocabulary of words or start at once with the sentence, being careful that word mastery become a feature of the work, is probably unimportant; but the concentration method points to the condition under which all progress in reading must take place, *i.e.* a condition of productive self-activity.

It must be observed that the so-called methods of

[1] For a fuller discussion of this method, as well as of other methods in reading, see "Talks on Pedagogics," by Francis W. Parker, E. L. Kellogg & Co. publishers.

teaching reading are all of them, with the exception of the concentration method, devices for helping children over the early difficulties of the subject. Most teachers who have studied methods of teaching reading are conscious of no method that extends with success in its application beyond the early primary grades. For this reason, on the part of really well-trained teachers, the teaching of reading grows more and more unscientific and unsatisfactory from its inception in the first grade. It will be seen that the concentration method is admirably adapted to secure an excellent reading habit, since the vigorous use of the mental activity in the reading process itself is its conspicuous feature.

It should be remarked that the relational element in the sentence is its distinguishing, its essential feature. Not concepts, but related concepts, give thoughts; not words, but words in relation, must help to the essential thinking process in reading. Everything that detracts from the power to give the mind fully and freely to the work of relating ideas hinders in the reading process. Everything that exalts this power of relating ideas furthers it.

Let us see what occurs when we read the following passage from Shakespeare's "Merchant of Venice": —

> "There's not the smallest orb which thou behold'st,
> But in his motion like an angel sings,
> Still quiring to the young-eyed cherubims."

Concepts or ideas enter consciousness recalled by the words that meet the eye; the stream of consciousness is regulated by the words themselves. These ideas enter consciousness as active forces and blend

and modify one another. There is not a word in the passage that does not contribute something to this modification and movement of thought. "Behold'st" suggests rapt seeing, "quiring" a full swell of harmony, "young-eyed" the eternal youth, the watchfulness and intelligence of the angel, "cherubims" names one of the choirs nearest God. But this halting definition is not what occurs when best reading takes place. The flow of ideas is not only regulated by the words, but it is as rhythmical and as perfectly modulated as the lines themselves. The teacher who is doing work in intensive reading over such rare passages carefully recalls related ideas, discusses certain words, challenges the apprehension of grammatical relation, etc., for the purpose of securing in the expressive reading that follows, a full, smooth flow of related ideas. Under such concept movement reading becomes delightful. Some measure of this activity must be induced or reading does not take place.

There are at least two essential features to the thinking process that we call reading. The first consists in the essential concept movement of which the above is an illustration. This flow of ever changing thought goes on continuously when we read continuously. It makes up the stream of ever moving, continuously modified, associated ideas which the series of related words that pass under the eye recalls. Through this process we come into possession of thoughts successively.

Another feature of the thought process which constitutes reading is what may be called the *thought development.* In a complete production the successive paragraphs and chapters stand in intimate sequence — the

content of one having a direct bearing on the following. The mind of the reader, grasping and holding closely the main thought of each paragraph or chapter as one succeeds the other, approaches steadily the central conception that constitutes the kernel of the whole production, *e.g.*: A class reading Shakespeare's "Macbeth" can appreciate Act I., Scene VII., only as they have followed the developing sequence of forces that culminate here in the deliberation and choice of Macbeth.[1]

Doubtless this phase of the reading process is most accurately secured by thinking through the whole. It is a process in which comparison and judgment are active and may properly be regarded as a process of reflection, while the first is more properly a process of concentration.

This activity of recalling and relating ideas so as clearly to grasp the thought content begins when the child reads his first sentences in the primary school; the process of thought development begins when he grasps related sentences in succession and gets the bearing of the whole, or when he is able to read a simple story and see the significance of one part in relation to another and to the whole. There is almost no limit to the possible development of power in each of these phases of the reading activity.

The teacher who would become a student of method in reading must study everything that furthers this essential reading process. Some of these things have already been discussed under Apperception and Reading and the Correlation of Reading with other Studies. We shall see some other important principles in the methodical teaching of reading in succeeding chapters.

[1] See Appendix III. and Chapter XIII.

CHAPTER IX.

BEGINNING TO READ.

THE work of beginning reading is attended with difficulty. This arises from the fact that, first, a written language must be mastered; and second, with the earliest act of gaining thought through the functioning of written words, the habit of sentence grasp must be vigorously initiated.

Furthermore, there are minor difficulties of making transition from script to print, from board work to printed slips and books, while the need of daily repetition of the growing vocabulary, in order that it may be thoroughly known, is ever present. Added to this, teachers in the first and second grades find few books at their disposal that are well adapted to the needs of their classes. This is especially true in large cities where children have had little free experience in the country and therefore have few and vague ideas relating to the subjects presented in these books and consequently little interest for the books themselves.

A thoughtful study of the foregoing suggests to the teacher that in preparing for her first reading lesson she has first to find a subject to which the child will gladly turn as an object of thought. From whatever source it is drawn it must represent to the child an object of interest and an object of which he has formed a clear visual image.

In the reading lesson proper the teacher desires the visual activity to be centred on word or sentence. She therefore arranges work so that the children shall have previously satisfied their perceptive activity over the object which is to become the subject of the lesson. In this way the danger of divided attention is avoided.

In the talk that makes up the body of the first lesson all the thinking must centre on this subject. If the teacher desires to introduce the name of the object first, she may, while uttering the word, write it on the board. The next time she omits the utterance, substituting the written form for the oral. In this way the children recall the concept through the visual form, and the work of associating the idea with the written word that represents it is begun. Again and again in the first, brief, animated talk, is the word clearly and rapidly written, and each time at a moment when attention is at its best — at a moment when the written form will recall its appropriate idea. If a short sentence is written first, the procedure is the same.

Children enjoy the novelty of an exercise of this sort. This fact is an important advantage for the teacher, for before the pleasure in the novelty of the exercise is gone, a sustained interest in the work must be created.

A few words or short sentences may be presented in this way, the crayon doing the talking for a part of the time. Such connection of spoken and written language should make one of the most profitable and pleasant devices in the early reading lessons. One thing should be remembered: words or sentences should be written clearly when there is perfect concentration of attention on the part of the class, and they should never be left

on the board for half looking, but the challenge for rapid, accurate seeing should be always made. Hence, as the work progresses words should be more and more rapidly written and more quickly erased.

These early sentences should represent a subject with an active verb. The utmost life and animation should enter into the work of getting thought through these sentences, *e.g.*: —

The caterpillar eats.
The caterpillar sleeps.
The caterpillar crawls.

My bird eats.
My bird sleeps.
My bird flies.

Remember that if the word is used first it must be quickly followed by the sentence; the sentence, if introduced first, must be analyzed into words. Every effort should be made to have the child grow to the recognition of the sentence unity and to develop the "sentence sense." He should be taught to read not word by word but sentence by sentence, *i.e.* the natural pause should be made at the end of the sentence, not after each word. When one writes on the board "The bird sleeps," he makes it possible for the act of reading to begin. Nothing less than subject and predicate in relation will do this. If words are used first, they must be regarded as a mere preparation for the work of reading proper. It may be questioned if this fact is not fundamental enough to warrant the assertion that from

[1] For further valuable suggestions see "Organic Education." Scott, published by D. C. Heath & Co.

the very beginning of any attempt to read, the sentence itself must be the means.

But in avoiding Scylla let us not fall into Charybdis. Words, as constituent parts of the sentence, must be mastered and mastered thoroughly. I wish my class in zoölogy to see the jumping legs of the grasshopper first in their original position. This does not, however, in the least forbid dissection. The very nature of the reading process makes it necessary that the mind be able to give itself to the thought activity. In order to do this it must be as nearly unconscious as possible of the visual perception of words. Complete word mastery alone makes this possible. I must ask my class to work with sentences then, when they *read*, but I must faithfully carry on daily exercises that train them in the sharp visual imaging of words. The word drill must be an essential feature of primary reading work. Only it must be made word-seeing not word-saying.[1]

At first the child's perceptive activity is probably helped by seeing the teacher write the new word or sentence, and he will not need to be told to "Watch while I write." The teacher who studies every condition that aids perceptive activity will succeed best in helping her class over the difficult work of mastering words thoroughly. The spacing of words and sentences

[1] A large number of repetitions are necessary before the word becomes a durable possession as an accurate visual and auditory image. Children in the first and second grades should have many short books calculated to give them new ideas and therefore interesting reading through their old vocabulary. ("The Life of a Bean," see Appendix I., illustrates such a book.) On such natural form of repetition all students of a new language depend for the complete mastering of a vocabulary. The child, too, is learning a new, a written language.

on the board should be considered; words that stand too near each other lose something of their sharpness of outline; words too far apart cannot be readily compared. The lines of the writing should be clear and firm. All eccentricities of form should be avoided. Simple, clear, vertical writing should introduce the child to the work.[1]

Let the teacher help the child in every way to the accurate perception of words and sentences, and then count it a crime to hurry the work beyond the pace that will give perfect mastery. Study, therefore, to read as many things as possible with the little, growing vocabulary of words, so that there may be much repetition with variety. The choice of the first vocabulary should be carefully considered. Choose only the words that can appear again and again in stories that the children enjoy. The teacher should keep a record of the child's growing vocabulary, and know if any words in this vocabulary are doubtfully mastered. Children are able to recognize a new word as it recurs again and again in the board lesson, but that same word is at best a partial stranger if a few days intervene without its repetition. Inexperienced teachers, deceived

[1] "Dr. Cohn résumés his rules [on the hygiene of reading] as follows: In the future I would have all school authorities, with measuring rule in hand, place upon the *Index librorum prohibitorum*, all school books which do not conform to the following measurements: The height of the smallest 'n' must be at least 1.5 mm. [.06 inches], the least width between the lines must be at least 2.5 mm. [.1 inches], the least thickness of the 'n' must be .25 mm. [.01 inches], the shortest distance between the letters .75 mm. [.03 inches], the greatest length of text line 100 mm [.4 inches], and the number of letters on a line must not exceed 60." "Pedagogical Seminary, Vol. II." This may be made suggestive in board work.

by the apparent precocity of the child, are wont to increase the vocabulary too rapidly, only to find after a few weeks that few words are really known. Reading under such conditions becomes impossible, since it inevitably compels the child to concentrate his energies on word pronunciation in the reading hour. It is doubtful, indeed, if a single right habit in reading can exist under such conditions.

A class probably cannot learn more than one new word a day on an average. In any case they should prove by the thoroughness of the work that they are capable of mastering more before this number is increased. The reading hour should be short, and, if possible, should recur several times during the school day. Lessons should be planned that will introduce old words again and again in new combinations. For this reason serial lessons are excellent. The teacher who is able to write a series of simple stories about one particular object will find that words will naturally repeat themselves, while the interest generated in one lesson appears as expectation and increased interest in the next lesson.

But while the growth of the vocabulary should be slow, the general pace or rate of the mental activity during the lesson hour must not drag. Most young teachers make the mistake of working too slowly with their classes. The child's mind should be challenged; it should be made to do not only accurate visualizing and exact thinking, but it should be made to do this as quickly as it can be done and done well. Indeed, it must be done quickly if it is done well.

That the rate of procedure has a direct influence on the process of concentration has not been sufficiently

understood. Movement is one of the striking features of concept life. Animated movement not only expresses interest, but tends directly toward the promotion of interest.

Even in intensive thinking, when there seems to be little forward movement of mind, there is, nevertheless, a strong movement about the object of thought. Concept movement often characterizes the going deeply into a subject, and becomes a movement down and around, rather than onward.

Children skip and run; the sober pace of the grown-up is often a trial to them. What is their natural mental pace? Do we hurt our classes most by strong, firm, onward movement or by a hesitating pace that induces a habit of mental lounging, where they look without seeing, and listen without hearing, and read without thinking?

Study the rate of movement in the reading lesson. Adjust the pace to the general condition of the class and to the character of the thought itself. Just as a stream begins to deposit the material that it is carrying when movement becomes slow, so thought activity begins to drop and lose its treasures under the retarded pace. Do not let the stream of consciousness slow down beyond the carrying point.

The first work in reading gains its chief significance from the great fact that it is initiating the most fundamental and valuable intellectual habit. The reading

[1] The study of the motor side has greatly helped in the work of securing better habits of attention in the schoolroom. Frequent and appropriate motor reactions should follow periods of intense concentration.

habit, reading power, is the most precious intellectual gift that the school holds for the child. If this habit fail of initiation in the first year there is, for the average child, but slender chance of its afterward being induced with real vigor and power. The teacher of the first grade who has trained a class that concentrate immediately on the subject of thought, when they reach the reading hour, and who love these hours and their reading book, has performed a work in their intellectual training of unequalled importance.

We might properly regard first-year work as the place where the school initiates habit. It is here that the habit of spelling is formed. The reading lesson and language lesson provide the important opportunity for learning to spell. When the teacher in the reading hour trains her class to note accurately the form of the new words, to distinguish carefully these words from related words so that the visual image is absolutely definite, she is doing excellent work in spelling. She is doing the same excellent work when, in the written language lesson, she trains the child never to create a word about the form of which he is doubtful. Such training develops the habit of spelling correctly. This consists of the habit —

(1) Of attending sharply to the form of new words.
(2) Of looking up faithfully all doubtful words.

Children in the early grades should be taught to ask for words about which they feel doubt (this asking habit being transformed later to the habit of consulting the dictionary). At the beginning of a written language exercise that involves words with whose

forms the children are doubtfully familiar, the class may be allowed to make a list of words that they think they will need, and the teacher should write them on the board, where they remain during the subsequent hour.

In the work of beginning to read the teacher must initiate the habit —

(1) Of forming accurate visual and auditory images of words.

(2) The habit of concentrating on thought through the written sentence.

In doing this the work of reading begins.

CHAPTER X.

THE READING PROCESS.

FROM the preceding, it becomes obvious that the power to grasp thought will be largely measured by power in concentration. If a young man in the high school is to possess the power that will enable him to read "Julius Cæsar" with a clear grasp of the central thought, he must be able to see the bearing of one thing on another; the relation of parts and the proportion of the whole must stand out clearly in his mind. The development of such power should begin in the first primary class, and it should continue uninterruptedly throughout school life.

The observance of a few simple laws will greatly aid in the development of such power: —

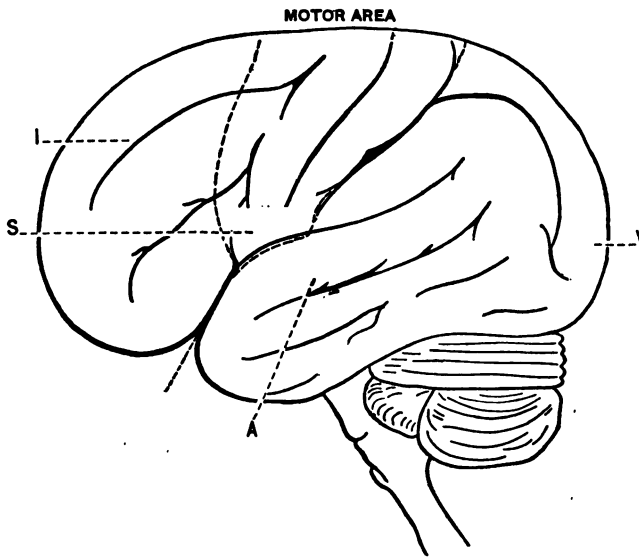
(1) The child should concentrate as much as possible on the thought from the beginning.

(2) He should be taught to grasp sentence wholes from the beginning.

(3) He should exercise the maximum of his power in doing this quickly and accurately. The law should be, the highest speed consistent with the greatest accuracy.

(4) The written symbol should recall the concept directly, never the concept through the oral word.

Just as the child gains the thought immediately through the spoken word, so he should grasp it through the written word. The latter should be much the easier and swifter process.



THE LEFT HEMISPHERE OF THE BRAIN.

S. Represents the centre for speech.
A. Represents the auditory centre.
V. Represents the visual centre.
I. Represents an assumed centre for ideational activity.

When the child is busy listening to spoken words the centres A and I are active. When he speaks to express thought the centres I and S are active with a kind of resonant activity in A (since one hears himself speak, although he does not listen consciously to his own speech). When he reads to get thought, V and I are

active. When he reads aloud at sight, grasping and giving thought at the same time, V and I and S and A are all active at once.

Think of the enormous complexity of the process that is forced on the child all at once when he is asked in the first primary grade to begin at once to read aloud. He is doing two things at once, for two distinct processes are involved: the first is the thought grasp, the second is the thought expression; moreover, these two processes are somewhat opposed — the first being the receptive form of self-activity, the second the impulsive form. Plainly, these two processes must be separated in the beginning; the receptive must precede the impulsive, impression must precede expression.

Oral reading has been used largely as a device for ascertaining if the child had mastered the words. Mischievous results have followed the abusive use of one process for the purpose of seeing that another process has been performed.

It may be seriously questioned if thousands of teachers who are teaching children "reading" do not deem the smooth utterance of words the great end of their work. That such teaching should lead directly to word pronunciation where no whit of the true reading process is present, is not strange.

When a child reads words only, V alone is active. When he reads to pronounce words merely, V and S are active with a resonance in A. In both cases the higher centre is inactive. A habit of this kind leaves it fallow. What shall we say of an education that induces such habits by its mode of procedure, that cripples the mind that it purposes to aid by leaving the higher thinking

powers stagnant and inactive during that period of life when they should be developing? If these powers do not gather strength and gain control, from whence comes the directing force in the individual life? Can teaching be stupid and ethical at the same time?

Let the teacher in the first primary room write a story on the board. Let the child find out the story, and then come and whisper it to the teacher. Let one child whisper the story to the teacher. Let the teacher write the story as the child whispers it, class get the thought, then perform an act to prove that it has been read.

Let the children ask questions about the object in science which they desire to have answered; the crayon answering them. Let the teacher write questions, the children giving answers. Let the children live into a picture, teacher tell its story with crayon: children silently finding out and telling the story. Let these and many other devices be introduced, that will enable the child at the beginning of reading to concentrate his whole power on the one great process of grasping the thought.

Several years ago I saw a very suggestive first-grade lesson under the direction of the late Dr. Mary V. Lee. The point of the lesson was to teach the children the personal pronouns. The children read each story silently and then acted out what each story called for while they read the story aloud, *e.g.*: —

We have a book.
You have a box.
I have the buttercup.
He has a fan.

The work delighted the children, and the device separated the process of thought getting from that of thought expression. Children should frequently be allowed to get the thought, and then give it without any reference to the written form. Only make the challenge severe — one thing at a time, but that one thing done perfectly. Teach the children to see and see quickly and accurately; if they can grasp the thought accurately with one look, so much the better.

A small child was once found in tears over his arithmetic. His mother tried to comfort him and said: "Can't you get the answer? Let me help you." "I can get the answer all right," he sobbed, "but it's the process that kills me." Children may be trusted to grasp the thought through written words with astonishing rapidity when steps are carefully taken, but when the process is made too complex, and they are asked to grasp the thought and give it at once, and that when words as written symbols are as strange to them as Chinese characters are to us, they are indeed in the sorry plight of the small boy with his arithmetic.

If the teaching of physiological psychology is true, then the menace in learning to read is in making the written word recall the oral word instead of immediately recalling the idea. Excessive oral reading induces this habit, and this is doubtless why in nearly every school one can find children in every class who pronounce words, merely. They have been required to do this when that was as much as they could attend to. The words they must pronounce — the process could be simplified only by leaving out the thought grasp.

Such children exercise V and S and A (see diagram), but exercise I very little, if at all.

A young teacher in a recent class report names a child who is one of the poorest readers in the class, but who is able to grasp the thought accurately at one reading. It may be questioned if this child were not the best reader in the class. Query, — Why was he a poor oral reader?

The following interesting case was reported by an intelligent teacher who believes that it represents a more than usually natural child yielding to the tendency to give himself up to the full sway of the thought process.

"In a reading class in the grammar school at F——, a boy of thirteen being called upon one day, read the first few sentences smoothly and quickly, but gradually read more slowly, till at last he ceased to speak at all. He still stood, however, book in hand, and evidently finished the selection, when he resumed his seat as though nothing unusual had happened. When questioned by the teacher, he looked surprised and a little embarrassed, but replied, 'I read it all!'

"This frequently happened afterward. Sometimes the child realized what he had done and apologized, offering as an excuse that he had been trying to find out what it meant.

"This boy is fairly bright in all his subjects, but is an especially good reader and an excellent story-teller. He does very good work in geography and is a wonder on account of his free lead pencil sketches, but he is not up to the average in arithmetic."

Oral reading has been almost the only device used

up to the present time to prove that the child has grasped the thought. It should be one of several important devices. The teacher should make the board lesson for the class sometimes, telling the story orally and using the written form for a part. This is particularly fortunate where dialogue enters or a story is inserted within the story — the story inserted making the written part. Such writing should be done clearly and rapidly, and when interest is at its height, the teacher trusting her eyes to make sure that the thought is grasped. Again, let the teacher and class make a board story together while some member of the class is asked to leave the room. When he returns let him read the story silently, and then read to the class, or better still, read it silently and then turn and tell the story back again to all. No better concentration could possibly be obtained from the whole class than through such a device.

But when would you unite the two processes, when would you have the work of grasping and giving thought at the same time begin? The answer is, Just when the children are ready, no sooner. Earlier it cannot begin without doing infinite harm. When the child shows you by undoubted symptoms that he is ready to carry on both processes at once, losing no whit of his hold on the important ideational process, let him do it. He will read to you then exactly as he would talk. Expression he should never be conscious of at all. Indeed, expression in oral reading is a matter not to be discussed. The thought itself makes its own expression, and it should do this as simply and perfectly in the case of oral reading as in the case of speaking.

It should be noticed that in suffering from brain fag, or any other condition that enfeebles ideational activity or causes it to cease entirely, we miscall more words when reading. Errors of this sort are sometimes so egregious as to be startling. If we are reading orally under such conditions, we often stumble, hesitate, and read in a generally bungling fashion. Does this suggest that the higher ideational centres when functioning vigorously react on the visual and speech centres as a stimulating force? May it not be true that on the psychical side as on the physiological the higher centres act as a controlling force? May not the ideational process be the governing force in reading, regulating the rate of seeing and saying, and determining the character of the visual perceptions themselves as well as the character of the motor impulses? If this be true, it is but another proof that the centre and soul and life of the whole activity of reading is the thinking process.

From every side it becomes apparent that the imperative thing is to secure concentration of the thought through the written words. Attention fastens on the written form because of what it gains. We listen because we get something by means of the auditory impressions. Visual and auditory impressions when we are dealing with symbols *function with respect to something else*. We listen to words, but we listen for ideas. I look to see the word and through it seize the idea. If the content presented has been previously mastered, the incentive for the visual activity is gone.

Reading should be, throughout the grades, the most delightful work of the day, as it is the most important when teachers give their whole thought to the great

central ideational process; then will excellent devices multiply which will give variety and zest, making reading attractive from its very beginning, so that a love for books will begin in the first primary grade, and a true literary taste find its genesis there.

Let us repeat the few important truths drawn from a study of the psychology of reading: —

(1) The grasp of thought through the written characters is reading.
(2) The processes of grasping and giving thought are two processes in one.
(3) At the beginning of the work the child can master but one of these.
(4) He reads when he masters the first.
(5) The forcing of the two processes defeats the end of reading. It interrupts the essential ideational process or it induces a halting habit.
(6) The child should unite the two processes when he has developed the power to do so, not sooner.
(7) The higher ideational process stimulates and regulates the lower visual and motor activities over words and in speech.
(8) Concentration must be on the thought through the written word.
(9) Reading must always present an interesting content in order to secure vigorous ideational activity that will act as an incentive to the mastery of the written form.

CHAPTER XI.

PRINCIPLES IN APPLICATION.

READING, as has been seen, is a process of thinking. The symbols are mere means, the process *par excellence* is that of grasping the thought. What is involved in getting the thought of another? Let us try to analyze this process on which all the work of reading hinges, as it must take place in any mind in order that it may grasp this little fragment from Browning: —

The year's at the Spring,
And day's at the morn,
Morning's at seven;
The hill-side's dew-pearled;
The lark's on the wing,
The snail's on the thorn;
God's in his heaven —
All's right with the world.

As we have seen, thoughts are concepts in relation; thinking is bringing concepts into relation. We have here words in relation. These words represent concepts. The relation of the concepts in the mind of Browning determined in the main the relation of the words in this poem. The process of getting Browning's thought must be something like the following: —

(1) My eye takes in the words of the poem in their relation.

(2) These words recall the concepts for which they stand in the order determined by the words.
(3) These concepts are related in consciousness.
(See p. 45.)

On what condition can I grasp Browning's thought? First, on the condition that I have corresponding concepts; second, on the condition that I can bring these concepts into corresponding relations.[1]

Of course the wealth of related concepts that I bring to the work — my personal attitude toward the ideas involved, the amount of content that I am able to put into such words as "God," "heaven," "world," "All's right," "dew-pearled," etc., will be strong modifying influences. But the main process described above must be gone through by every mind that would think Browning's thought, the differences in details are individual variations. Now a very important thing must be noted in this reading process. Activity must focus in the ideational process. Consciousness must be centred on the thought relation. The mind must be intent on relating ideas. This is always true of one who is reading successfully. The recall of words should be automatic and unconscious. Of this

[1] "Getting the Author's Thought" is a somewhat misleading expression. Every thoughtful student in psychology knows that no one could possibly expect to secure a succession of concepts exactly similar to those of the writer whom he reads. More than this, he knows that in reading one of his own productions the succession of concepts would never be exactly repeated, hence, the thought is, in each reproduction, slightly different from that in any preceding one. But in reading the author largely controls our thinking, and the expression, "Getting the Author's Thought," has therefore an intelligible and justifiable use.

recall we probably are unconscious if concentration is perfect.

It is very clear that the teacher who regards reading as a process of thought getting will proceed in one way, while the teacher who thinks of reading as an oral exercise carried on in connection with the book will proceed in quite another way. The first will direct all her efforts toward inducing a vigorous carrying-out of the central process. Her devices will all tend to concentration on it. She will measure her success by the growing power of the children to live into now one form of literature, now another. She will find no limit to the possible power that may be developed. She will be surprised at the variety and individual character of the children's responses. She will be gratified by the growing interest. She is working with the central life of her subject, and the children respond with thought, emotion, desire, living images, growing impulse, and this life that she is helping on in its development reacts as a quickening force upon her own. She is teaching.

The second teacher, who has her psychical vision fixed upon oral expression as the end in view, proceeds quite differently. The words must be properly uttered. What now is the right expression? Since she has no rational means of determining this, she must find a more formal way. The reading must not drag, enunciation must be clear, pauses must be made in the right place. The child must hold his book in the right hand. The head must be held erect; he must count one (silently) for the comma, two for the semicolon, three for the colon, and four for the period.

From this teaching two results follow. Mary astonishes us by the glib way in which she rattles off her stanza of the "Psalm of Life," and we question gravely if she knows what she is reading. Mary sits with satisfied pride. She knows that the teacher herself could not have gone through the process more expeditiously. John, poor fellow, who is not often called on, rises doubtfully and utters his stanza a word at a time, with pauses of varying lengths, depending on the difficulty of the word to be pronounced. The voice keeps the forced "dead level." He is ashamed of himself, and he hates reading. Mary and John are exceptions, but they are exceptions found in most schools, and in some schools these exceptions are numerous enough well-nigh to make the rule.

When one has learned to read and has acquired a discriminating taste in reading, he is in possession of the most important feature in education that the school can possibly give. Wanting this power to read, he is in no sense educated, though he be a post-graduate student at one of the first universities. Neither Mary nor John know how to read, and saddest of all they are neither of them likely to learn. The school has induced a totally wrong attitude toward books on the part of one, and a strong disinclination for books on the part of the other. "But," it may be urged by some one, "there are few teachers indeed, who regard reading as mere word pronunciation, who are themselves content with the glib pronunciation; most reading teachers try to interest the children in the thought." This could hardly be granted, if all the schools supported by public moneys are included. The fact is, that on the part of

many teachers, almost the sole means of thought getting is made through oral reading, and the lesson counts for little more than an exercise for the class in pronunciation.

The writer once visited a more than usually attractive primary class in the city of I——. A group of children were asked to take their places for a reading exercise. A printed slip, growing out of previous science work, was passed to each child. The children were given a few minutes to read the slips silently before the work of oral reading began. One child in the group almost immediately forgot everything but the bit of literature before him; his concentration was complete. Every other child read "with half an eye." It was inferred that this divided attention grew out of the consciousness of the class being centred on the oral reading for which this was but a preparation. The class were interested in reading as an oral exercise which had for them something of the character of an exhibition. The true meaning of oral reading they were not getting, while thought grasp was enfeebled by the weakened concentration. Does not excessive oral reading generate a kind of self-consciousness?

When we disabuse ourselves of our prejudices in favor of excessive oral reading and begin to work simply and solely to develop power in reading and a right taste for books, we shall be surprised at the number and variety of devices that will be invented for the purpose of helping both teacher and child. Reading aloud will then become a delightful pleasure.

Oral reading should by no means be left out of the school course. It may enter early as one of several

excellent exercises connected with the reading work. Reading aloud gives expression to the thought that has been grasped. To the teacher it may be made an invaluable means of determining the character of the thought activity. To the child it may be a most wholesome means of sharing pleasure and stimulating intellectual and social sympathy. Always it should be the spontaneous expression of the thought process that is going on parallel with the uttered words.

To recapitulate : —

(1) The reading process takes place when the words in order recall concepts in relation.

(2) It is greatly modified by apperceiving ideas.

(3) The consciousness of the reader should be centred on the ideas.

(4) The teacher's view of the reading process will determine his procedure and its results.

(5) Over emphasis of oral reading produces self-consciousness and weakened concentration on the part of the class.

(6) Oral reading should be introduced as a single phase of reading work, *i.e.*, as a means of self-expression.

CHAPTER XII.

"READING TOGETHER."

THE schoolroom is the centre of a social life, and reading together should be one of the means of developing social sympathy and of stimulating intellectual growth. There are doubtless many ways for teacher and class to read together. The book or the leaflet in the schoolroom library that has been read by each, and that has afterward been made the subject of a free discussion in one of the reading hours, where opportunity is given for citing parts that have been specially enjoyed, or in discussing the significance of this or that, or why this or that happened, or what in the hero is liked best, etc., has been read together. The selection that has been read orally by all, where the succession of ideas occupy the consciousness of all, has been read together. The gem from Longfellow that is carefully thought through under the direction of the teacher's questions and suggestions, that is grasped by all while only one perhaps reads it aloud, has been read together.

The class, with books open at the same page, — who are "taking their turn" while their minds are variously occupied; a few in watching for mistakes (strange device!), other few with the content of the page before them; this boy with the loss of his marbles and that with the injustice of the teacher, while still another is wondering where he can borrow a knife to fashion a

well-planned whistle, etc., — this class are not reading together.

When the primary teacher comes to the book for the first time, she meets her first great obstacle in trying to have the class read together. It is evident that if she tries to keep back the quick pupils to the pace which the slow ones must take, she will induce habits of mind-wandering that will be disastrous to the reading habit. Plainly, at this point, these minds should not be harnessed together in the work of thought getting. What can be done?

Said an excellent principal of long experience: "I discovered that a little beginning class in reading met one of the most difficult obstacles when they used the book for the first time and were required to keep together. This year we said, 'We will let the children take their own pace in getting the thought, unhampered by each other.' The experiment was a success. When I entered the room each child was eager to show me where he was reading. All were doing genuine work. This class has developed a great love for books. One day when their teacher was about to tell them a story, they asked if she would not read it to them instead." Oral reading had become more attractive to these children than story telling.

Let a class who have had a series of board lessons growing out of their study of the bean take such a series of lessons as is shown in Appendix I. and busy themselves in reading, reporting to the teacher from time to time, so that she is assured that the work is being done accurately. Then let the children come together to have a little talk, now over "The Baby

Bean in Bed," now about the "Awakening of the Baby Bean," etc. In this way the children really live the book through together. This is securing a common self-activity which is beneficial and stimulating to all and harmful to none.

There is a kind of reading together that unites the whole class mind in a common work of vivid realization. Many selections that should enter the reading hour can only be read in this way. Let us examine a little poem from Tennyson as an illustration of this.

The Eagle.

He clasps the crag with hooked hands;
Close to the sun in lonely lands
Ring'd with the azure world he stands.

The wrinkled sea beneath him crawls,
He watches from his mountain walls,
And like a thunderbolt he falls.

Let a fourth or fifth grade class, after a study of the eagle in their science work on birds, be given this wonderful little poem. The six lines give a complete picture. How can we treat the poem so that the class will actually visualize the whole?

One plan might be to recall the important characteristics of the eagle suggested by the poem before opening the books at all, — the great strength and swiftness of the creature, his life in upper air, his love for lonely haunts, his habits with his prey. With these apperceiving ideas close to consciousness turn to the poem and live it through slowly, line by line. Note the force of

such expressions as "clasps," "hooked hands," "ring'd," "azure world," "wrinkled sea," "crawls," "thunderbolt," etc. By no means let this work drop into definition, but let it rather be a vivid realizing of what the expression suggests. Now let some one read it aloud. Last of all, let one repeat from memory.[1]

A charming and profitable phase of reading together may be secured when the teacher reads to his class. For a teacher to love the expressive side of reading, and to love to share with his children the rarest book treats, means the securing of much common pleasure and the stimulation of the reading habit.

I fancy that many a child and youth feels over his teacher's reading as the pupil in the drawing-room feels over the strokes of his master's pencil. He were a foolish master who never took the brush in his own

[1] Reading, more than any other study perhaps, depends for interest and effectiveness, on the imaging power of the child. In the High School we appreciate the splendid power of a student who can read Shakespeare's "Merchant of Venice" or Longfellow's "Golden Legend," with a vivid reproduction of their imagery. His pleasure and power in the work is immeasurably greater than that of the average student who probably reconstructs this imagery in the most faulty and fragmentary way.

The average child in the beginning class undoubtedly images quite spontaneously in reading. If the power were properly trained, it would give the pupil a stock of sense images which would be invaluable in future reading work. From the earliest primary class teachers should allow the child to read nothing involving sense imagery unless he has a stock of concepts that will make vivid realization of the content possible. Preparatory work in reading should include work in providing adequate sense images. To this end the school should spare no pains in providing for sense experience. "The book," says Professor Dewey, "is harmful as a substitute for experience, it is all-important in interpreting and expanding experience."

hand, *to stimulate the motor activity of his pupils through their eyes.* Such object lessons are not lost. They are model lessons, in fact. To know how to read to a class, and to know when and what to read to them, is to greatly increase the social spirit of the school, stimulate interest in reading, and make the children love the hour of reading together.

There are teachers who read a book like "Little Lord Fauntleroy" with their class during the last hour of the Friday session. Some who read the passage from Homer that has been the subject of study in the literature or story work: others who read the history of Joseph or Moses right from the Bible, and do this in a way to give their classes rare, unforgettable moments. Who shall say that they are not teaching reading?

We crave sympathy in our pleasures. If children are to enjoy books, they must be helped to rare hours of delightful intercourse with beautiful things, an intercourse more precious, more full of life-giving influences because it is stimulated by a sense of sympathy, of common feeling, of common life.

It is in reading together that the pure literary taste is formed and the love of books engendered.

CHAPTER XIII.

GETTING THE CENTRAL THOUGHT.

THE most advanced students who have been well trained read for two main purposes: first to supplement and fill out their regular work in its various lines, and second for the love of it, — to satisfy a genuine literary taste. Most of these students have already found their favorite authors, and love their comradeship as of congenial friends. Such students read for knowledge; they read also for recreation, for inner refreshment.

As has been suggested, the child in the primary department should find these two sides early in his school experience. The first he finds represented by supplementary reading from science, and later from story work, geography, and history. The second he finds represented by well-selected poems and fables and whole texts that are truly classic and that introduce him at once to choice literature. The development of the taste for good books will depend in large part on the character of the literature that is put into the child's hands, but it will depend also on the treatment of such material in the reading hour. Literary insight must be developed, or the individual taste will be in danger of becoming whimsical, unregulated, one-sided, and the reading habit will be of doubtful continuity.

Books, like pictures, may be trusted to teach themselves to some extent, but one has only to sit down for an hour's careful analysis of Leonardo da Vinci's "Last Supper," Raphael's "Transfiguration," or Tintoretto's "Crucifixion," to convince himself that insight comes with study. The amount of study, and the character of study, depends on the picture itself. This is true of books. The teacher who is reading "Hans Brinker" with his class, contents himself by introducing a picture, by sketching a map, or by showing some historic object here and there to help the children more vividly appreciate the content. The discussion at the close of each section gives sufficient opportunity for the work of interpretation. But there are stories and books that must be more closely studied, selections in which nothing is grasped unless the kernel of the whole is found. Let us look at an illustration of this kind: —

The Donkey and the Grasshopper.

Once upon a time a donkey heard a grasshopper chirping in the grass. He was very much pleased with the beautiful song. "Ah," said he to himself, "if I could sing like that how happy I would be." So he bowed low to the grasshopper and said, "Kind friend, what food do you eat to make your voice so sweet?" "I drink the evening dew," replied the grasshopper. The foolish donkey tried to live on the same food and died of hunger. Foolish fellow! He was not born to sing.

(*From* "Stepping Stones to Literature," Second Reader.)

This little fable is taken from a reader, one of the striking features of which is the great number of selections that are true wholes, that is, contain a central thought of real interest, which the framework and setting bring out clearly. Such selections not only are admirably adapted to interest the child, for the child is always interested when he is receiving something of real worth that is adapted to his needs, but their simplicity and brevity afford an admirable opportunity for developing the power of encompassing a whole and grasping the central thought.

"Be content to do your own work," embodies the central truth of this fable. In teaching selections of this sort it is important for the teacher himself to reach a clear comprehension of the central truth, and then to decide how he can lead his class to find it.

Children will readily enough see that the grasshopper must have the food for which he is adapted, and do the work for which he is adapted; and, in seeing this, they instinctively feel the futility and absurdity of the donkey's attempt at imitation. Little children enjoy the humor of such selections as adults rarely do. Now they must be led to see that the donkey had an important work of his own, for which he was well fitted. They will love to tell of the work of other creatures, the horse, the dog, the birds. Of each they see that it takes up the work for which it is adapted. The teacher's quiet "Yes, every creature has its own place and should do its own work," is a sufficient generalization. If she wishes application, the simple "I wonder if boys and girls have their own work to do?" will be enough. Little children should be taught the

great truth that the work they are doing each day is as truly work, if it be done well, as that which father and mother are doing. Children should never be hurried on to such a central thought, but should grow to it slowly and grasp it clearly.

The value of such work as this in developing a real literary insight may be more clearly seen in a more sustained production. Let us take Browning's "Hervé Riel" as an illustration. (For the text of this poem see Appendix III.) Here is an important truth for an American child: true patriotism is unselfish; the patriotic act is not performed — for the sake of reward.

The poem presents work for several lessons. Let us try to find subdivisions that represent unities, each of which may be taught in one lesson. The following divisions could be made: —

(1) The Pursuit.
To, "Then was called a council."
(2) The Council.
Ending with, "Give the word."
(3) The Volunteers.
To, "Not a minute more to wait."
(4) The Rescue.
Ending with, "Pleasant riding on the Rance."
(5) The Reward.
Ending with, "Nothing more."
(9) The Poet's Tribute.
To end of poem.

Careful work must be done in preparation for a series of lessons of this sort. (See discussion of Apper-

ception, Chapter VI.) This preparatory work should, first, review important facts in history bearing on the point, *e.g.* general condition of France, of England, power of the English navy; second, it should review geography of the locality, which gives the setting of the poem, locating places named in the poem; third, it should review the events immediately preceding that narrated in the poem, that is, the defeat at the Hogue, position of fleets. Such preliminary work of preparation should be done with each unity, as showing the value of her navy to the French nation, the work of pilots, their knowledge of the coast, and before the sixth division the pupils should be told something of the way in which France has honored Napoleon, and should be given some idea of the great gallery of the Louvre, and the feeling of Frenchmen for it. Compare the fame of Hervé Riel's act as depicted in a picture hung in the Louvre and as sung by Browning. Help them to see how a great poet immortalizes the deed that he sings.

A good plan to follow in the study of such a poem is for the teacher to read the selection through to the class after the preparatory work is finished, so as to put the whole before them. Now begin the special study of the various divisions. Let the class live fully into each division; ask for no oral reading of this division until it has impressed itself on the class thought. After the last division has been read, give a final lesson, in which you lead the class to a clear grasp of the central thought. What is Hervé Riel offered? Why did he desire to serve? ("Burn the fleet, and ruin France? That were worse than fifty Hogues!") His reception

of honor and reward. ("Just the same man as before.") His motive.

Now let the pupils name others who have acted in this way — Leonidas, Alfred the Great, Washington. Bring out the motive of action in each case. Compare these heroes, and decide why they served. The teacher should confirm the class judgment with a definite though quiet assent, "Yes, the true patriot never serves for the sake of reward." In application the teacher may allow the class to decide if our own nation has need of patriots (our late war with Spain developed some admirable examples of quiet acts of heroism).

Not all selections can be treated in this way, but when the whole import of a text is to teach some one important truth, the pupils should be helped to see that truth clearly and strongly. Power in literary insight grows with such work. One feels this in more sustained productions (see Appendix IV.), but too often overlooks the fact that the child's earliest reading should give the beginning of such power. The child who clearly grasps the thought of the sentence may be helped to grasp the import of the whole story, and later he may be trained to distinguish the leading thought, paragraph by paragraph, chapter by chapter, and then to seize on the great central truth of the whole. This is power.

All great literature is ethical. The central thought, the essential heart of the classic, be it short or long, that you help your class to find, is ethical. It should, if possible, represent something that they are ready to receive. It should fit into their lives in a close, intimate, organic way.

Do not try to teach many selections of this sort in one term, lest their essential work of growing into the class thought — into their lives — be interrupted.

Many productions have a most valuable central truth that can better be implied, than directly stated. To illustrate: —

Bird Thoughts.

I lived first in a little house,
And lived there very well;
I thought the world was small and round,
And made of pale blue shell.

I lived next in a little nest,
Nor needed any other;
I thought the world was made of straw,
And brooded by my mother.

One day I fluttered from the nest,
To see what I could find,
I said, "The world is made of leaves, —
I have been very blind."

At length I flew beyond the tree,
Quite fit for grown-up labors,
I don't know how the world is made,
And neither do my neighbors.

A teacher who understands the significance of such child questions as, "If you go on and on as far as you can on the land, what do you come to then?" "If you

go down and down, what do you find at last?"—the teacher who remembers his own childish efforts to construct an orderly framework for the world in which he lived, will make this lesson a means of helping the child understand these questions and difficulties. The child but follows here the history of the race. He constructs his world in thought and modifies it by subsequent experiences.

The settings of the poem must themselves be fully prepared for in a previous lesson or they will not carry thought safely in its movement beyond. Help the children in this preparatory lesson to think of the bird life within the shell. (Be sure they think of it as life.) When the birdling begins to stir, he finds the enclosing shell on all sides. He pecks his way through, to find himself in the nest. There he becomes conscious of his mother, of the nest, of the little brood that fill it, etc. Let the class follow the growing circles of the birdling's life until it reaches into the world.

Now they are ready for the poem. When this has been well read let the child find the parallel between his own life and that of the bird. At first he knew his own home and its inmates only. Then he reached the neighborhood and then the school. Now he knows that the great round world contains many lands, many cities, many peoples, etc., and the stars are worlds beyond.

We must remember that scientific facts do not necessarily induce vivid thinking of reality. The child's active imagination, regulated by perceptive work over concrete material, restrained by apperceptive activity, must animate these facts,—unify them, create them anew. Suggestions of the way this may be done are

found in Kipling, Ernest Seton Thompson, Miss Andrews, and in much simple science work done by teachers themselves. The reading lesson of this character affords opportunity for such work. Out of it the child is indeed constructing his world.

CHAPTER XIV.

INTENSIVE AND EXTENSIVE READING.

LITERATURE affords two distinct classes of productions: the one condensed, where thought is large in proportion to the number of words; the other diffuse, where content is distributed over wide spaces. The first must be read through a process of close thinking, the second by a rapid grasp of points successively. In the first the work is close, analytical, and exhaustive, in the second rapid, clear, and comprehensive. We have already seen illustrations of the first in "Bird Thoughts," Tennyson's "Eagle," and "Hervé Riel." Such texts often express a single central truth, and should as a rule lead the reader to a clear general notion, as illustrated in "Hervé Riel." Tennyson's "Eagle," however, contains no such central truth, yet it is an excellent illustration of intensive reading.

Intensive reading asks that there shall be a strong grasp of minor thoughts or details, and exercise of judgment in getting the full significance of individual passages and a clear comprehension of the central ideas in relation to these details. Let us look at such a poem as Longfellow's "Building of the Ship" as an illustration of intensive reading.

Build me straight, O worthy Master,
Stanch and strong, a goodly vessel,

That shall laugh at all disaster,
And with wave and whirlwind wrestle!

The teacher desires to make this poem a means of giving the class a conception of our country as a civil and social framework which has been in making during the course of our national history; at the same time he desires the class to feel the need of endurance and strength in that framework and the importance of wise guidance for the ship.

In preparation, the teacher is careful to see that the class have the necessary apperceiving ideas for the understanding of the work of ship-building. A few facts should be given describing work done at Cramps in Philadelphia, in the Fairfax Yards in Glasgow, or in some other noted ship-building centre. Have the pupils understand something as to the time required to build a great warship like the *Oregon*, the cost, the number of men employed, the significance of the architect's work, the care with which the "ribs of steel" must be wrought, etc.

In the reading of this poem not so much can be gained by a careful study of single expressions as by bringing related thoughts to bear so that an intelligent interpretation may result, *e.g.* let the children themselves give a few facts respecting the force of "wave" and "whirlwind"; let them decide why the launching is so significant. When does a ship really begin to live? What is the test of her worth? Let the children compare the launching with some other ceremony having a similar significance. What must be the feeling of the builder who has wrought well? Why? What will

determine the subsequent history of the ship? This history will be seen as influenced by the character of building, by the crew and officers of the ship, quite as much as by the storms and dangerous rocks she may meet.

> Humanity with all its fears,
> With all the hopes of future years,
> Is hanging breathless on thy fate!

What is the significance to the people when the ship of state goes wrong? when it is wrecked? This the children can illustrate from their knowledge of general history, where they have learned something of the experience of subject nations. Be sure that they understand from facts drawn from the history of famous ships that their greatest dangers come from within. Give them Nelson's great motto: —

> We know what Master laid thy keel,
> What Workmen wrought thy ribs of steel,

Let the children mention some of our national workmen and tell the time when some of these "ribs of steel" were shaped.

In the work of intensive reading much depends on selecting texts adapted to the children's stage of development. The treatment too should be adjusted to the children; for instance, the above selection would have a significance in eighth grade work at the time when the children are studying the civil history of their own country (See "Course of Study in History" by Emily J. Rice, published by D. C. Heath & Co.) and just at the

point in the study when they are ready to form a unified conception of our national life. In this stage of the study patriotic ideals and motives should be strong and clear in the children's thought; this must be so if the study of their country's history is to exercise a truly educative influence.

From the above it will be seen that much of the interest and consequent power developed in intensive reading depends on the wealth of related ideas brought to the subject.

"He who has at any time given himself up *con amore* to any object of human activity understands what concentration means," says Herbart. Intensive reading is most effective when teacher and pupils alike can for the time lose themselves in the work. At such moments the class themselves may be trusted to bring the full wealth of their experience to the subject and to exercise to the fullest extent judgment and imagination. In this way the reading hour carries all into the world created by the text itself. The most artistic work is always done in such hours of self-forgetful interest. The very inflection and tones of the voice become adjusted instinctively to the thought. Expression becomes the natural correlate of impression, and all moves rhythmically.

In thoroughly logical selections it is an admirable plan for the class to find sometimes the subject or central idea of each successive paragraph, thus determining the logical series of minor points that lead up to the major. To illustrate: in the supposed speech of John Adams (see Appendix II.) the paragraphs show the following topics: —

An unconditional personal approval of the Declaration.

Importance of continuing the war.

Advantages of such a Declaration to the American cause.

Loyalty of the people.

Effect of the Declaration on the people.

The personal peril of the signers.

The endurance of such a Declaration.

Unconditional personal approval of the Declaration.

(Pupils should account for the similarity of content in the first and last paragraph.)

A little work done in helping the class to this sort of paragraph grasp will greatly increase their power of logical thinking in reading, and will lead directly to the power of grasping sustained wholes.

We must remember that we are teaching literature in such work, *i.e.* we are forming habits in reading, developing literary taste and insight, and disciplining pupils for the great literary masterpieces.

As we have already observed, intensive and extensive reading have grown up from the character of literature itself, as well as from the demands for a proper literary training. While it is true that power to grasp thought intensively is perhaps the rarest reading power, yet it should be matched by the power to grasp thought rapidly and comprehensively. No one is educated until he is able to think well into highly condensed passages, nor is he educated until he can read a book, chapter by chapter, and grasp the central idea.

Extensive reading aims to develop the latter power. Very much is involved in such extensive reading. Just

as intensive reading must guard against dropping into the tiresome, so must extensive reading guard against the danger of discursiveness.

Power in extensive reading can only develop as the pupil gains in power to grasp details rapidly, put them into right relation, and deduce from them the important points contained in the whole. To hold paragraph after paragraph, chapter after chapter in consciousness, in such wise that the main thought grows constantly to the end, to establish the proper thought sequences so that at the end the whole of a sustained selection or book is before the mind in its entirety — this is what extensive reading should accomplish. This can only be done by gaining the central point of each section as the reading proceeds. Many minor details drop from consciousness while these important subordinates are held steadily in mind. Only so can the proper sequence of important points be established. To illustrate : —

In reading the "Snow Queen," by Hans Andersen, with a third-year class (see Riverside Literature Series, No. 50, Houghton, Mifflin & Co.), the teacher would desire the children to grasp clearly the following points : —

The character of the mirror.

The effect on Kay when one of its splinters enters his heart.

Gerda's faith.

Gerda's helpers.

How Kay is rescued.

A class will readily grasp the kernel of the story when this point is reached, viz.: the redeeming power of Gerda's faith and love.

A few sustained texts of this character should be read each year. The outcome of the work gives the class power in approaching that large class of books of fiction and travel that children so much enjoy, and that make up so considerable a portion of adult reading.

CHAPTER XV.

THE PICTURE AND ITS USE.

If all sharp, clear concepts of sensible objects were confined to those with which we have direct sense experience, we should be poor indeed. Very much of our teaching work is expended in helping children in forming ideas of things distant from them in time and space. Geography is pushed outward, from the child's environment where sense experience has given him his stock of apperceiving ideas, to the entire earth, and if astronomy aid, beyond this to the universe. In history he transcends the time and space limits, and the concept, at first limited to the society in which he lives, is made to include other ages and countries. In the study of the life history of any animal or plant he realizes the existence of conditions that he cannot directly observe.

How does the mind secure accurate images of things it has never seen? You answer, By the exercise of the imaging power, which uses the concrete material formed by sense perception and builds it into various forms, as reason and judgment direct. Clear concepts of hill, and stream, and miniature plain, of bird and flower, of house and village, of human industries, of types of men and women, of definite acts and their results, etc., — these afford most valuable concrete material. But such material should be helpfully supplemented by pictures.

A psychology class numbering seventy pupils was

once asked to form a clear visual image of a desert with pyramids in the foreground. Most of the students formed with great readiness accurate images, so that questions with respect to color, size, proportion, etc., were readily and accurately answered. In determining the particular character which the image took the majority of the class decided that it had been influenced by pictures. The writer is conscious that the pictures of Gérôme have done very much in modifying and giving character to her own images of the desert and of desert life.

Pictures, then, as affording important material in teaching, deserve most careful study. And since they very properly hold a conspicuous place in our reading books, their part in reading work should be carefully considered.

There are two valuable classes of pictures in use to-day. The one class aims directly at instruction, the other aims to please as well. Both classes are educative, but the first educates by imparting facts directly, the second by awakening the æsthetic and moral feelings. Both appeal to judgment, but the first makes its strongest appeal to the analytic judgment, the second to the æsthetic and moral judgment. If we look at the illustrations accompanying the little primer, the text of which is given in the Appendix, we find that most of the pictures are drawings of the bean plant made from life. These drawings emphasize now one feature of the bean plant, now another. They have a single advantage over the object itself; the class have analyzed this object, and since the drawings bring into strong prominence now one feature, now another, they

help the analytical activity of the observer. Such pictures are placed in the book for the direct purpose of instructing.

Suppose, on the other hand, we have such a picture as Millet's "Angelus" before us. Here is a picture that is much more than a drawing. The artist has done more than analyze his subject; he has a lively feeling for it, and to the mind of the sympathetic observer he succeeds in imparting something of this feeling. The truth which the picture carries is not so easily put into words as the first; it is a vastly more complex thing. One turns from it with the same feeling that he experiences in closing a book containing one of the world's great dramas or epics — the reading is not finished, and it cannot soon be finished.

We have already observed that perceptive activity must be active over the first class of pictures in much the same way as over the object itself — the perceptive activity must be directed to the important features of the picture. To illustrate: the teacher who looks with her class at a picture of Esquimaux showing their huts, their sledges, snowshoes, manner of dress, weapons, etc., can greatly aid the class in forming more exact visual images of these things by seeing that the children make accurate observations and comparisons, *e.g.* "try to discover the material from which the hut is made." "The average Esquimau is five and one-half feet; one man is standing close by the hut; try to determine its height." "Judging from its external appearance, what would you expect to be the appearance of the room or rooms within, as to shape? Height? Lighting?" etc. "Determine the height of the entrance."

"Why do you think it is so small?" "Why placed in this position?" etc. The settings of such pictures, too, have many facts of value for the child, who must depend on them largely for the accuracy of his concepts. "When the Esquimau emerges from his hut what meets his eye?" "I wonder what changes would take place in this view from day to day? from season to season?" The children will love to think of the beautiful flashes of color that sometimes meet the eye of the Esquimau child, of the signs of spring that he would see and feel, of the way the driving snowstorm shuts him in, of his pleasure in welcoming home the father returning from the seal hunt, etc.

It is needless to say that where descriptions accompany the picture, the picture should be carefully observed first, since the clear visual images formed from these will help the child in the interpretation of the description, and give zest and life to its reading. The child's own mind should be observed, and his natural return to the picture for "another look" seconded by the teacher.

The picture of cathedral, of town, of landscape, or of mountain, that is introduced for the purpose of giving the child necessary concrete material for forming accurate concepts, should be treated in much the same way. In showing a picture of Mont Blanc, for example, the children should be asked not only to note the character of the slopes, to select the accessible parts, to estimate the climb that these suggest — but he should accurately note every change of vegetation and life that a good photograph presents, and account for these. A little work of this kind greatly enhances the interest of the

reading lesson, and is invaluable in giving life and reality to the text so illumined.

Many of the art pictures finding their way into our reading books belong to the second class referred to above. Although they often carry many facts with them that are of great value in the direct work of helping the child to accurate concepts, yet their real aim is never the mere imparting of facts. Breton's "Song of the Lark" is a picture of this kind, as are many of Lerolle's and nearly all of Millet's. The peasant girl in the "Song of the Lark" in dress, movement, and expression is a picture from life.

The presentation of such pictures must be largely modified by the character of the picture itself, and by its immediate relation to the lesson which it is meant to illumine. There are times when a simple question that carries the children to the central thought of the whole and leaves long pauses in which the picture itself can speak, is best of all. To illustrate in the above, the simple question, "Where is the song?" will carry the children far toward a true appreciation of the whole. For the artist tells them that the song is not merely in the air but in the heart of the girl. A common sympathy that unites all with each other and with the picture itself is the best means of approaching such a work of art. In such moments the most truly educative work is done. A scrap of poetry may be suggested, like Longfellow's "Arrow and Song," or there may be a projection of the thought of all into the peasant life represented, so that its wholesome sweetness penetrates the thought. In such moments æsthetic and moral aspects of the picture assert them-

selves, and it is fortunate indeed when they follow the merely perceptive activity which they should complete.

Pictures of this sort should if possible be placed in the room for a few days, where they do their own silent teaching, and do it most effectively. Children should be helped to an understanding of how such pictures are made. Stories and incidents from the lives of the artists themselves will often add very much to the educative value of the picture. That most difficult and important side of education which develops right feeling, awakens and conserves the better desires, stimulates the imagination which it controls and purifies, is most effectively furthered by such pictures. The teacher who is carefully making her collection of photographs and prints to enrich the reading hour is employing one of the most efficient means of making the children true readers.

We have said that the value of pictures to children may be greatly enhanced by simple stories from the lives of the artists. The children who are enjoying Giotto's tower should be helped not merely to an appreciation of its architectural beauty and a conception of the lovely pictures of Florence framed in by its exquisite windows, but they will love to connect with this noble tower the simple story of the shepherd boy. Michael Angelo's David, always loved by the children, should be related not merely to the beautiful Bible narrative from whence it was drawn, but the children should associate with it the story of its making out of the great block of dust-covered marble, which was so illy shaped that no artist until Angelo was found to form it into a great statue. This is a picture for the

adolescent, and the whole history of its making is in striking harmony with its subject, in its power to inspire adolescent ideals.

There are many great pictures with which there is associated some story that affords a key to the understanding of the work itself. This is illustrated in Raphael's "St. Margaret," Guido Reni's "Aurora," Botticelli's "Tobias and the Angel," and many others. The telling of these stories, clearly, simply, and at the moment when the child is ready to make a real approach to the picture, is an important feature in its proper presentation.

Mrs. Jameson's "Memoirs of Italian Artists" and her "Sacred and Legendary Art" afford a storehouse whence teachers may draw excellent material for such work. Most stories of this sort need to be adapted to the needs of the children. The character of the class itself must determine the amount and character of material selected. There are lives of artists that have in them little to educate any class. Fortunately, however, the lives of the greatest masters teem with material that affords true conceptions of the artist's devotion to his work, and beautiful, true glimpses of the conditions under which that work was done.

To summarize: —

(1) We depend on the imaging power of the child for vivid and accurate concrete concepts.
(2) These concepts are necessary to intelligent reading.
(3) The picture may be made a means of giving us such concepts.

(4) The picture should be accurately perceived and apperceived.

(5) The treatment of the picture must be modified by the character of the picture itself, and by its relation to the work in hand.

(6) There should be associated with pictures carefully selected stories from the lives of the artists, or narrations which serve as a key to the understanding of the pictures.

XVI.

THE CHILD AND THE BOOK.

A CLASS of young teachers were recently asked to recall their own experiences in learning to read. Out of the fifty, nineteen had been taught by the alphabet method, although it had been abandoned in every good school before many of them were born; eleven had been taught by the word method, and as many more by the sentence method; six had taught themselves to read, and in some cases had shown much ingenuity in doing so. The striking feature of this report was the uniform agreement of all as to the feeling toward books awakened by this early work. All agreed that they became indifferent to the reading books, if they did not positively dislike them, associating with them the idea of drudgery. Most of them had learned to love other books.

When does a child begin to dislike his reading book? What are the conditions that induce such a dislike? Has not one reason been discovered by this report? The child associates with these books the idea of drudgery, and probably with just cause. The pleasurable element in his reading work has, on the whole, been a minimum. With the book there entered forced attention, reluctant acquiescence, tiresome repetitions, — the whole a weary grind.

For the child to become conscious of his work as

drudgery is from every standpoint an evil. When he awakens to the fact that he is going to the book because he is told, not because the book invites, the chances of arousing a spontaneous interest are greatly lessened, and much has been lost.

How does the child act over the book when he follows the invitation that *it* gives? He reads and enjoys some one thing until satisfied; when he returns to the book he reads something else. He turns for the second and third time to the stories that he likes, and he goes through all and lingers longest where pastures are most inviting. His procedure is similar to that of an adult, and why should it not be? What would be the effect on the adult mind if it were denied the right to this natural procedure in reading?

Another cause of drudgery may lie in the character of the book itself. The returns which a child secures from his activity over the book are often very meagre in comparison with the labor expended. It is the productive activity that gives the truest pleasure. This fact holds good for the child as well as for the adult. The productive side of reading activity lies in the ideational process. Of the child more cannot be demanded than of the adult. He must get something that he wants from a labor that is relatively greater than that of the adult, or he is dissatisfied. The ideational activity must have overcome the consciousness of perceptive effort over the words or the child is drudging, and he will soon discover it. He receives returns for his work in the content; if it is not there, he is poorly paid, and soon becomes an unwilling laborer.

We must seriously and honestly ask ourselves what

the child would like to read about, not what we would like to have him like to read about, before we shall altogether release him from the sense of drudgery. A charming home-made reading book was discovered in the hands of a little girl a few months since. It was teaching her to read, and she loved it dearly. It was made up of funny little situations of the Mother Goose type written in rhyme and accompanied by drawings. The element of wonder is strong in the child, and his love for the fairy tale persists for many years. How have our reading books answered this demand in the child's nature?

If we have neglected the child's interest in making our children's books, we have equally neglected his stock of apperceiving ideas. Probably no one has given serious thought to the immense difficulty a child meets in the apperception of the average reading book. To the child bred in the large city, many a reading book must appear dull and uninteresting.

An examination of a first reader shows the following list of titles: The Moth, The Sheep, The Cow, The Horse, The Bee, The Hen, The Duck, The Rabbit, The Fish, The Snail, The Cat, The Squirrel, The Spider. Place over against this list the following facts reported from the children of Boston of school age: 54 per cent did not know the sheep, 18.5 per cent did not know the cow, 52 per cent did not know the bee, 19 per cent did know the hen. Out of 150 boys and girls more than 50 per cent did not know the squirrel, and more than 70 per cent did not know the snail. (See report of G. Stanley Hall in "Pedagogical Seminary," No. I., Vol. I. on "The Contents of Children's Minds on entering

School.") That this condition is not confined to our very large cities is shown in a recent report of Principal Drum of Syracuse, N.Y. Among the children in his school ranging in age from seven to fifteen years, 12.6 per cent did not know the squirrel, 7.5 per cent did not know the frog, 46.1 per cent did not know growing wheat, and 35 per cent did not know the crow. By many a city child a story like Kipling's "White Seal" could be more readily understood than a story about a sheep. The zoölogical garden is more likely to have acquainted him with the former, and moreover the story carries its own setting so truly that it is much better calculated to develop true concepts of the animal in its environment than is the average scientific description.

When we remember that the child's interest is dependent on the number and character of concepts recalled by the words, we must conclude that the child and the object must be brought together in some wholesome way, or we must cease to describe these objects in his books. For it is certain that the reading book alone can never teach the child what he has not apperceiving ideas to grasp. Moreover, such vague and senseless teaching stultifies the mind and begins the work of intellectual dependence.

It should be noted in this connection that the animals introduced in the fable or the fairy story cannot be properly included in this list, since they are there merely as lay figures to point to something else. They are not directly the subjects of thought, nor are they represented in any but a personified way, and this the child instinctively appreciates.

The child's book must be made for *him*, and he himself must determine what it shall be. Most children's books must be transformed in time, through the study of children themselves. It may be questioned if they themselves may not help to make them.

Apperceptive ideas modify perceptive activity, not only directing it, but enriching and stimulating it. The man who has grown familiar with the history of our Civil War looks into the face of Lincoln and sees there lines and expressions that escape another who lacks these apperceiving concepts. If you want Lincoln's face to look beautiful to the children, tell them incidents that speak of his great heart of love, of his long patience, of his untiring patriotism, of his gentleness and sympathy.

An adult looks at pictures and reads books with a stock of interpreting ideas that largely determine his view. How would he look at these things without these ideas? Undoubtedly, most of the pictures would be uninteresting, the books insipid. The child often looks at things without apperceiving ideas, but has he no power to take their place?

The adult perceives and apperceives, the child perceives and fancies. He clothes his perceptions with his happy active imagination. What he gets from this activity we do not clearly know, but we may be certain that it is something that is animate and attractive to himself. Is it strange that he does not like our books that leave this lovely atmosphere of life and color out? that force him out of his native atmosphere and ask him to see what he has not yet grown to understand? that forget that God himself has ordained that the child

should think in this way and that we thus devise in vain another mode of thought for him?

Only a living teacher, who fully realizes the enormous difficulties that the children meet when they begin the work of reading from books, may be trusted to secure them from a sense of drudgery with its accompanying evils.

Pleasure in effort is measured by the quality of returns as well as by their quantity. Fortunately, in the first attempt to master the book, there is a feeling on the child's part of something new to be overcome. To work successfully is to increase this just sense of something won. Successful perceptive activity over the words there must be, or the result is not true. Teach the child to know instantly the words that he knows, and to know as quickly the stranger as a stranger. Words not known must not be slid over, or the child will soon become weary of work done poorly. The teacher who accepts no whispered story (sentence) from the board or book that is not accurately reported is developing this sense of honest self-respect that should characterize every worker. Anticipate the child's difficulty, provide for the overcoming of it so that it will seem like overcoming to him when he meets it, and he will not feel like a drudge. But the child cannot carry the sense of slipshod work with a light heart any more than can an adult. It will help to make him feel himself a bungling workman, and a bungling workman who is kept to his task is indeed a drudge.

Let delightful hours of companionship grow up between the teacher and the class over the reading books. Let the teacher add the wealth of his own interest to

the subject-matter in such wise that the child reads at every step to gain new pleasure in new insight.

In a little monograph on reading, G. Stanley Hall tells us how Mrs. John Wesley dressed her children in their best clothes one morning and taught them the alphabet in that one day. Dr. Hall complains with Colonel Parker, that we make the child's burden in large part by our own way of regarding his work as a task.

One of the keenest intellectual pleasures, as it is one of the most stimulating, is the sense of overcoming. Work should be so spontaneous as to be pleasurable in the main, just because it is happy self-expression. But children, even when very young, should know the happiness that comes from doing something that has cost real effort.

One of the strongest points in favor of teaching children phonics is that it helps them to help themselves, that it gives them a means of securing the results of independent effort.

The child's three or four years in the primary school ought to be of greater worth than any period of equal length which follows. There is no other period when it is more important for him to do his best. He has work to do then, and he should be helped to do it cheerfully, intelligibly, successfully. We would not make him a drudge, but we would if we could, make him love to work in such wise that he goes home to meet his father and mother with a clear sense of having done his part in the environment to which he has been intrusted. The meaning of work, the true meaning of activity, of service, should be taught in the primary

department. No child should go out from it who has not learned to work, who has not learned to respect himself more because he works, who has not learned to put forth effort unflinchingly when that effort is required, and who has not learned the pure pleasure of having done his "level best."

This means the generation of an interest so sustained as to induce a desire for doing one's part — as to stimulate will to do it. Children should always be dealt with truthfully. They should never be left to work without true motives. Let them understand, as far as may be, the purpose of the work in general, as well as the aim of the general lesson procedure in particular. A child should be sometimes stimulated by the simple fact that there is a bit of hard work before him in the reading lesson. Let him put forth his best effort, let him feel the challenge that the work makes, let him climb—but be sure that he reaches the upper air and gets the exhilarating effects of his efforts. At such moments teachers must be true comrades — not to praise or cheaply commend, but to simply stand by, to be alert, to see that the activity take the right direction, and that at last the worker receive some touch of responsive gladness when the battle is won. The reading lesson with its besetting difficulties gives abundant opportunity for such work. Let the child learn in these hard places to be a conqueror, and he will never be a drudge. Let us learn that lectures on good behavior are not required when children work thus. They are gaining moral fibre as well as intellectual poise through such work.

The pleasurable anticipation that Mrs. Wesley's children brought to the work of learning the alphabet

probably made the activity over it a stimulating recreation. Concentration was increased, and results were multiplied. Add the element of song to the work of mastering the first reading book, and you will have no need to fear the entrance of the spirit of drudgery.

CHAPTER XVII.

THE READING HABIT.

READING has been justly styled the "key to culture." The school has in the past been so absorbed in devolving power in pronouncing words or in helping children to read orally, that it has forgotten the great end of reading proper. For with the key must be given power to use it and a habit of using it.

The conspicuous failure in the teaching of reading in the past has been due to this grievous error. It was not perceived that a development of a taste for reading, an interest in the content of the thing read, is the great fact in making a reader, as it is the source of the stimulating influences that make the overcoming of formal difficulties a comparatively easy matter. There can be no doubt but that very much of the labor spent in the school over the reading lesson is in vain. More than this, there can be no doubt that the work is frequently mischievous, inducing, as it often does, wrong habits and a distaste for books.

To make our children readers we must induce a love of books, and we must cease to feel that a child must do all of his reading aloud. It is doubtful if reading should be begun in the first year at all, but when it is begun it should be begun heartily. In the very first year of its beginning a keen interest in books should be developed, and several books should be read in that year.

There is need of simple primers for little children written on subjects in which they are interested, where the whole book represents continuity of thought.

Every schoolroom should have its own little collection of choice books adapted to the stage of development of the children, and in the periods of leisure before school, after school, at the rainy day recess, or in the leisure moments of finished lessons, the children should be allowed to use these books freely. We should remember that the average home represented by the children in the public schools has a meagre stock of best books for children; and we should remember, too, that the public library does not as a rule provide for the needs of young children, nor does it attempt to form the taste of any child.

He who gives a child power to get thought by means of printed characters has put into his possession a means, which, if it be properly used, may educate him; but he who has done this, and in addition has induced the love for good literature, has educated him. It has been clearly proven that young children like good pictures best. It is not until the taste has become perverted that pleasure is gained from the tawdry and the overdone. This is as true with books as with pictures. Many an adult of pure literary instinct finds pleasure in Miss Andrews' books, in Grimms' and Andersen's "Fairy Tales," in "Robinson Crusoe," in Kipling's "Jungle Books," in Charles Kingsley's "Water Babies," and children with unspoiled taste like these books best. We must remember here, as in art, that the all-important thing is for the school to create a love for such books before the taste has become vitiated.

The range of true classics widens with the child's growing power and interest. Begin as soon as possible to put whole texts of best things in literature into the reading class. Our reading books, made up of fragments, have helped to develop a taste for scrappy reading, just as they have signally failed to awaken genuine interest in good literature.

It is noticeable in literature work with children that they invariably prefer the classic form of the story to the text that has been written especially for them. Classes like to read "Hiawatha" from the original text best; they listen with keener pleasure to a passage from the "Iliad" or "Odyssey" in Bryant's translation than to some prose form written for boys and girls. This suggests that we do not need to adapt the classics to the children, because the children are adapted to the classics.

But one can look at good pictures superficially and grow into a sentimentalist; so one may learn to play with good literature. Children must be helped to a development of power in reading intensively. As a rule, the longer the class shows a desire to linger over the best things,—the more intensively it reads them,—the better the work. A few things should be read in this way every year, beginning with the fable or fairy tale in the first year, where children are helped to grasp the central ethical truth, and ending only with the power to grasp and trace the development of the great ethical content of one of Shakespeare's best dramas. Power to read good books means as a rule inclination toward good books. The thorough reading of a few classics will go very far toward making it impossible for

the child to take pleasure in the merely sensational. To give him the power of strong grasp of these best things is to give him genuine pleasure in them and to make him at the same time conscious of the emptiness of tawdry books.

The reading habit is greatly furthered by helping children to find their book friends, and then helping them to be true to these friends. There are times when the rapid continuous reading of a text with a firm mental grasp on the whole is most commendable, but he only is a perfectly good reader who has found an author deep enough to be lingered with and returned to again and again. Children have their favorite songs and stories; let the teacher find these and help further the tendency to read the poem, that "we have been so happy over," again and yet again. Mental fibre develops with such work, and constancy is a first condition in moral development.

Very much of literature consists in books that acquaint us with other environments and other ages. The power of vivid realization should be systematically cultivated. This is not merely an important means of helping children to the content of books, but such imaging activity gives products that are clear cut, complete, connected, and so better remembered. Such knowledge is an active, living possession, a treasure, and an increasing pleasure to its possessor. Pictures and concrete material of every sort should be made to aid in giving children proper beginnings. Judgment should be appealed to, and every means employed to induce regulated and effective work in imagination.

Perceptive activity of some sort should precede any attempt to visualize that which is distant. A child who is familiar with the aquarium in Central Park, and who has seen the ocean, will follow Kipling's story of the "White Seal"; these experiences providing him with the proper elements for imaging. The teacher who is reading Longfellow's "Golden Legend" with the grammar grade should, by means of pictures and descriptions, help the children to live through every stage of the journey from Germany into Italy. Such work induces the habit of regulated imagination. Such work means life for teacher and pupils alike. A common interest, a comradeship in pleasure, grows up between them unconsciously, and then the happiest conditions of growth enter, and the way becomes delightful.

We must not try to thrust our own reading habits, our way of looking at books, upon our classes. The treatment, as well as the choice of material, must be determined in large part by the class itself. The pupils who are reading Cæsar's "Gallic Wars" in Latin may find great pleasure in Shakespeare's "Julius Cæsar," for the purpose of realizing the great closing drama in his life. Or they may read comparatively, to see how Shakespeare's representation of Cæsar compares with that unconscious exhibition of his own character shown throughout the Commentaries. Again, it may be read with the class in civics from the political standpoint, or it may make a profitable study for a class from a purely ethical point of view.

Many of us have read the same book at several times in our lives, and each time from a new view-

point. Indeed, the old volumes of Homer and Dante and Shakespeare are very good landmarks from which to measure our own development. New experiences, new ideas, new conceptions of life, renew these books; we apperceive them anew. (Ask yourself what the child brings to the book before you determine how you will present it to him.)

"Habit enfeebles all passive impressions and develops all active operations," says Compayre. In its simple, normal course, habit, in order to perpetuate itself in the most fortunate way, must be friendly to the organism, serviceable to the essential life. To determine on the necessary, vigorous, healthful reactions, and to plant these in the life of the pupil so that the most fortunate self-expression results, is an all-important work in education.

The teacher who has successfully helped a child to work with the relation of ideas by means of printed words has secured a vital reaction that has in it the power of growing into a living habit. Mental functioning of this sort is productive; it creates its own reactions, it generates healthful resultant stimulations, hence it has power of intensive, healthful self-perpetuation.

If we look for the cause of this, we find that the mind in this work of relating concepts is finding its own natural and wholesome activity. The rhythmical freedom and movement of this activity is familiar to us as interest. To that which interests us, we return again and again. We may put it in another way, and say that the child has gained something, that his activity is productive, for the "I have an idea" is, after all,

the expression of a mental acquisition. It is therefore pleasurably stimulating.

The habit imposed from without lacks tenacity. That which is purely artificial takes but feeble hold. We have need to be grateful indeed for this great law of life, as potent in the world of mind as in the physical world. Because of it the sins of omission and commission, that have filled our schools with grievous mistakes and produced results that reproach us, have not utterly destroyed the lives that they have crippled. The child has preserved himself from the artificiality of much of the teaching work that has but stultified his mind, by afterward sloughing off the wretched psychical habits that it had induced. No one can expect for a moment to make a child a reader of words only, and keep him a reader. Be sure he will not trouble himself with such make-believe activity when once he is free to choose for himself.

In the discussion of the reading habit we must never for an instant lose sight of the fact that it rests on this foundation. The habit has grown into life and found its roots when this initial power has developed into a systematic healthful activity. The teacher who helps the child to this power of grasping thought has induced the potential conditions that may yet go astray. Not until the child has developed a selective interest in books of a wholesome sort, is the reading habit safely established. For these potential conditions may be turned from a normal course; the child may learn to take poisonous food and like the taste of it. Bad literature may become agreeable.

Plainly the school has two great things to do in

teaching reading in a truly educative way. It must by the use of right method induce power in grasping thought, and it must by the development of a discriminating taste make it possible for that power to perpetuate itself healthfully.

CHAPTER XVIII.

THE TEACHER'S PREPARATION.

THE first condition of making profitable the reading lessons, drawn from science, lies in the teacher herself. The first step toward successful work is made by the teacher in her own study of material.

This science work can in no wise be done from books alone. The teacher without eyes will inevitably have a class that do not see. Her own eyes must be open, and her interest active, in the field where she would work successfully with her class.

The laws for the development of her powers of observation are precisely those that govern her class. She must do actual work on the material itself; she must learn to do her work thoroughly, exactly. Let her observe, draw, describe. If she can do this in a disinterested way, for the love of the work, so much the better; interest will then be spontaneous, and spontaneous interest possesses a strong contagious quality.

Favorite haunts are known to lovers only. Flowers blossom, birds build, plants grow, living creatures thrive for him who cares for them. The teacher who learns to care for nature through her own study will find it growing into her life as a saving power. No class of workers needs strong, healthful, intellectual stimulation more than teachers. A teacher should be an enthusiastic student, not merely that he may develop a respon-

sive enthusiasm in his pupils, but for his own sake. The demands on the vital life of the teacher are very great, and he must reënforce himself constantly in a hearty, wholesome *re*-creation, or wear exceeds repair, and the essential element of spontaneity begins to decline.

Let teachers make their own observations, using books for direction and confirmation. Let them make their own drawings, their own descriptions. Carry these rules into teaching: help the children to see accurately and to express with exactness and originality what they see, by means of drawing as well as description. Let the greatest possible wealth of association, consistent with orderly progress, gather around the work, and let the whole be penetrated by a wholesome interest.

It is one of the beautiful laws of compensation that the work we do in an effort toward better service enriches us in turn tenfold. Every hour spent in keeping children after school could be exchanged for hours by the brookside, in the park, in the haunts where children love to go, and where wise grown folk love to be. Every bit of strong, positive work makes it possible to drop some negative, oppressive condition that is hurtful to teacher and pupil alike.

"One thing that happened in that first field lesson," said an intelligent Minneapolis lady, "was this — the children discovered the teacher! They had not suspected until that day that she was human!"

It is true that the teacher must mediate between the child and the book, but it is twice true of the science book. No science reader can be written for children

that does not presuppose much preliminary work on the part of the teacher. The reading lesson is not the science lesson, and there should be no attempt to make it such. Bright, enthusiastic work in nature study should generate the interest — lead the way — and the reading should follow. It is impossible for any one but the teacher to write a perfect nature reader for any particular class. If it seems desirable for the class to use the ready-made reader, they must be prepared for it.

Since the material in reading work introduces the child into the two great worlds of humanity and science, the teacher herself must live in both. She must be as sympathetic a comrade in the first as in the second. Indeed, the former field requires the clearer eye.

In the treatment of historic and literary material the teacher begins the great work of interpreting the world of humanity for the child. For she is not merely establishing historic and literary sequences, she is building up a framework of knowledge into which the child's own life must be consciously set later when he awakens to the fact that he himself is a part of this world of humanity. The teacher's method of doing his work on the historic-literary side will determine much with respect to his pupil's attitude toward life. It will be a force to help or hinder the pupil in putting himself into right relation to life on all sides.

Much work must be done before the child is prepared with clear, vigorous, true, well-articulated ideas respecting life as it exhibits itself in the physical world. More work must be done before he comprehends intelligently the world of humanity to which he belongs.

When the period of adolescence is reached, and the

child awakens to a new consciousness of social and ethical laws and their operation in his own life, when the character of the future man begins to take definite form, then the ideas of life which the school has been forming are forces to determine and shape the future.

Reading work which passes over into literature that never ceases to be an important feature in the lives of intelligent men and women will do much in shaping such ideas. The child finding a teacher who loves great literature, who enjoys good art, and who at the same time possesses an intelligent social sympathy is indeed fortunate. He has found a friend, a comrade, a leader, who will reveal to him the world of which he is unconscious, in a way to inform the intellect, stimulate noble desires, and set forces at work that are potent in the formation of living character.

Finally, it must be frankly confessed that there are many unsolved problems connected with the teaching of reading. Many of these can be solved by teachers only. The successful solution of the reading problem must come from the children themselves. Those who are nearest to them are in the place of vantage in finding this solution. Every day children are telling their teachers in the reading class by undoubted signs things that puzzle the wise.

The following are some of the questions that we must answer from our observation of children: —

(1) What phases of plant life interest the child most?

(2) To what extent does the care of plants enhance the child's interest in them?

(3) What is the child's way of looking at a plant or an animal, or at nature in general? Is his perceptive activity like the adult's, or is it more largely mixed with fancy?

(4) What is the effect on the child of doing severely exact science work according to the adult standard? Would it not be more scientific to ask him to do it well in the child's way?

(5) What is the exact order of the difficulties, major and minor, that a child must meet in mastering reading through the first primer?

(6) What are the effects of phonics on the child's work in the first grade, in the second grade, in the fourth grade?

(7) Does the use of phonics interfere with the habit of quickly recognizing the word as a whole?

(8) What other means of sharpening auditory perceptions can you devise?

(9) To what extent do children do work in the silent pronunciation of words as they read?

(10) Does this tendency increase or decrease with concentration? What are the characteristics of the mental activity when the child becomes thoroughly interested?

(11) To what extent does the stimulating effect of a perfectly rhythmic and successful ideational activity react on the visualizing process over words?

(12) Does the child learn the words more easily when he is interested? More unconsciously? Does the thinking process tend to make us work with sentence wholes, or with words separately?

As the reading process becomes more and more successful, does the "sentence sense" increase or decrease?

(13) How may we develop this "sentence sense" in the child?

(14) Under what condition does the child return to the word, "letting go" of the thought entirely?

What is the effect of this on the emotional tone? On results in work? On the reading habit?

(15) Try simplifying a fairy tale and make a reading lesson of it: watch the results narrowly. Try Mother Goose with your first grade: watch the results. Distinguish between a love of novelty and a genuine growing interest in the subject itself. Is there anything in common between the two?

(16) Analyze the most successful devices you have used in your reading work and determine what element in the device makes it effective. Try to have the first oral reading grow spontaneously from the child's desire for expression, and note the character of the expression.

Try to make oral reading a means of expression merely, a means of putting the child into a closer social and sympathetic relation with others, watch the result in the child's general attitude toward the subject. If a reading book were to be made just for the child alone, what would it be like?

(17) As you have opportunity of watching children

who have been variously taught, try to determine exactly the effects of the various methods.

Why do your children spell poorly? Why do they spell well?

(18) To what extent does the rate of procedure effect concentration?

(19) Try to find the very best of which your pupils are capable along various lines:—

Rapid, accurate visual perception.
Rapid, accurate auditory perceptions.
Power to grasp the sentence as a whole.
Power to think by means of printed sentences.
Power to sustain concentration.

What is the effect on the children themselves of letting them drop below this best possible?

(20) What is the effect on the child of believing that the thing to be done is hard before he begins to do it?

The teacher who has observed these and kindred problems for herself, reaching carefully thought out conclusions and adjusting the work at every step to the needs of her class, will have taught herself how to teach reading.

XIX.

CONTRIBUTIONS OF RECENT PSYCHOLOGY TO READING.

THE processes involved in reading have been made the subject of psychological investigation for the last ten years, with the result that new light has been thrown on many previously obscure points.

All oral reading aloud calls into activity four sets of images: —

(1) The visual images of words.
(2) The auditory images of words.
(3) Motor images of speech organs in pronunciation.
(4) The ideas and imagery arising from the central thought process.

The visual perception of words as it takes place in reading has had much light thrown on it by means of psychological experiment. First as regards eye movements in reading: —

It has been ascertained by means of photographic registration that the eye does not move across the line in reading, at a uniform rate. On the contrary, *it moves in jerks or short sweeps, pausing with somewhat regular periodicity from point to point. Seeing takes place at these points of fixation.* "It is mainly, if not solely, during the pauses that the eye is susceptible to significant stimulation." (Erdmann and Dodge, "Psychologische Untersuchungen über das Lesen.")

Landolt found that an image of one and fifty-five

hundredths words was received per fixation. Speed in reading is probably best secured by lessening the number of fixation points and by decreasing the length of the fixation pause. The forward movement of the eye itself occupies a fairly constant time. Huey found (*American Journal of Psychology*, April, 1900) that the passages read at maximum speed show a decrease in the length of the reading pause, and as the speed of eye movement is not increased it would seem that increase of rate in reading is brought about solely, or at least mainly, by *decreasing the number and duration of the reading pauses.*

W. F. Dearborn (Columbia University Contributions to Philosophy and Psychology, Vol. XIV., No. I.) places the average fixations from five to eight per line. A larger number of pauses is made in difficult than in comparatively simple narration, and the simpler the text, the more equal are the pauses and movements. Reading of a foreign language requires more fixations, as does the reading of disconnected words, of numbers, and of lists of proper nouns. The smaller the visual area, the clearer will be the fixation.

It is agreed that from $\frac{1}{18}$ to $\frac{2}{24}$ of the reading time is consumed by fixations, hence recognition of words must take place in the fixation pause. Time or duration of the fixations is more variable than the number of fixations per line.

Cattell found (*Brain*, Vol. VIII., p. 304) that in the average fixation, consciousness can at one time grasp four numbers, three or four letters, two words, or a sentence composed of four words. That is, *twice as many words can be seen when given in connection.*

The physiological limitations of visual perception and the requirements of apperception and assimilation are constant factors in determining movement of eyes in reading. Duration of fixation periods is necessarily exceedingly variable. "If, for example, the attention pauses on some word or phrase, singles out some misspelling, passes hurriedly over a commonplace of thought or a familiar phrase, or again lingers on the difficult parts of the sentence, we shall find some indication at least of these facts in the varying duration of the pauses, and the peculiarities of the movement of the eye."

Changes in the size of the type and distance of page from the eye have little effect on rate. Changes in the length of the line have the greatest effect on number of pauses. *The same number of words will be read with fewer fixations when arranged in short, uniform lines.* Let us see the reason for this.

The return sweep of the eye in beginning a new line is almost invariably unbroken until near the beginning of the new line, where an occasional halt is made apparently to enable the eye to get its bearings on the new line. The experiments made with adults from 119 of the longer lines show 21 such stops. These are more numerous in long lines than in shorter ones. (Huey, *Am. Jour. of Psy.*, Vol. II., p. 288.) *The eye, as it sweeps backward from the last fixation point in the line read, must accurately place the beginning of the new line.* This can be done more readily if lines are short and of uniform length.

The tendency of the reader is to make the eye movement regular and the fixation pauses periodical: broken

lines are a great hindrance to this most desirable rhythm in reading, as they always increase the strain on the eye. Yet broken lines are the rule rather than the exception for most books for beginners. Dearborn suggests a line of 75 mm. to 85 mm., or about a third longer than the ordinary newspaper line of the New York dailies, as a favorable length.

We read from the left toward the right. The motor impulse is a forward one *toward the right.* In the fixation pause there is a well-marked tendency to read farther toward the right than toward the left; this is particularly true with fast readers where large amounts are read. Dearborn thinks that *the attention is ahead and pulling the eye along.*

Zeitler remarks that "the field of attention is not identical with the field of vision. The first is psychological; the latter physiological. *The widening of the field of attention is a matter of practice.*"

Zeitler distinguishes carefully between the somewhat objective process of fixating the word and correctly recognizing it (apperception of word) and the process of assimilating and apprehending the meaning — a process characterized subjectively by a passive, continually adaptive attention.

There are other aspects of visual perception important especially to the primary teacher of reading. It is agreed that we recognize words as wholes — but do all the letters of the word help equally in its rapid visual perception? or are there letters that make the *high relief* of the word and so give it a distinguishing character? Again, does the eye make most use of middle-line, above-the-line, or below-the-line impressions?

Javal found that *the upper half of the letters were most important for reading*, as can be seen at once by dividing a line in halves horizontally and comparing the legibility of the upper and lower halves; he concluded that the fixation point moves along between the middle and top of the small letters.

Cattell found that different letters were perceived in different time lengths.

Zeitler (Wundt's "Philosophische Studien," Vol. XVI.) found by experiment that letters projecting above and below the line were most clearly perceived. *The letters that make the high relief of the word give it its characteristic form, and are "dominating letters."* In visual perception, the eye "springs forward from point to point of this high relief."

The "letter continuum" which makes the printed lines of the page, Zeitler classifies according to its likenesses and differences into the following groups: —

I. 1. Vowels *i e o a u.*
   2. Middle-line consonants:
      a) *c v n m w;*
      b) *r s z x.*

II. Above-the-line consonants: *t l f b h d k.*

III. Below-the-line consonants, *q p y g.* j

Cattell discovered that not all letters of the same alphabet are equally legible; for example, *o q g c* are easily confused with one another.

The dominating letters and syllables in words and the dominating words in the sentence give individual character to the whole. The eye seizes on that in the given whole which gives it a distinctive character.

This process of perceiving words and sentences exactly parallels the perception of all individual things, or unified groups of things. It is the "dominating complexes" that are really perceived; it is the small unimportant letters that we are wont to change.

Zeitler thinks that the definite fixing of the letters in the word is secured only through a knowledge of its meaning. The mind sees in the word the form which the meaning calls for. If the word is not known, "the letters fall into confusion." The word form remains uncertain until the meaning is grasped. Therefore the "letter complex" is seized on by the eye but established by the sense.

So Zeitler concludes that assimilation shows itself clearly as a process of uniting the directly aroused visual images and secondary reproduced elements. *We read from within outward the visual activity over words tending to become reflex in character, while the mind is occupied with the thought.* The central process which is involved in getting the meaning reacts into the mere visualizing process, in the way of filling out word forms through "reading in" meaning.

The less help we get from the meaning, the more we must get from the form. Attention tends to fasten on the unknown region of a new word which falls into known syllables and unknown letter groups. Zeitler believes that *unknown words are read spelling-wise; known words assimilation-wise.*

Huey found that the first half of the word influenced perception more strongly than the last half. Pillsbury found that the first letters play the most prominent part in the recognition of the word as a whole.

Words are also better differentiated in their upper than lower half. This is accounted for in Messmer's count which showed 238 letters projecting above the line, to 32 below. This means that *the upper part of the line is vastly richer in high relief.* (See "The Psychology and Pedagogy of Reading" by Edmund Burke Huey, p. 66.)

The length of the word plays a very inconsiderable part in the time of recognition. "It does not ordinarily take any longer to read a long word of ten letters than it does a short word of three," says Dearborn; "in fact, the short word may cause the greater difficulty."

Huey's four readers (*ibid.*, p. 101) made the following record in reading the lists of letters and words aloud as fast as possible: —

50 letters in an average of 15.7 seconds.
50 four-letter words in an average of 17.3 seconds.
50 eight-letter words in an average of 19.6 seconds.
50 twelve-letter words in an average of 28.5 seconds.
50 sixteen-letter words in an average of 54.1. seconds.

"Since part of the slightly lessened speed of reading eight-letter words as compared with those of four letters must probably be due to the utterance of the additional syllable or syllables in the former case, it seems certain that the recognition of familiar and comparatively short words is little affected by doubling the number of letters; and this seems confirmatory of the view that such words are recognized in one unitary act as wholes. The greatly lessened speed of reading the words of sixteen letters as compared with those of twelve is due in part to their being considerably less

familiar. It is probably due in much greater part to the need of making lateral movements of the eye, these words occupying a considerable horizontal space when typewritten for use in the experiments."

Messmer finds that the readers do not get any very distinct notion of the length of the words exposed, very often mistaking a word for one much shorter, occasionally for a longer one. This was especially the case with his child readers, and he thinks that for them, at least, word-length is but a minor factor in word-perception. (*Ibid.*, p. 96.)

Legibility and all that makes for legibility is an important factor in the perception of visual words.

Sanford made an early study of the legibility of the small letters (*Am. Jour. of Psy.*, Vol. I.). He concludes that legibility will be favored by enlarging the size and increasing the differences of the letters — making an effort to preserve simplicity of outline. "It is from simplifications and emphasis of the points of difference that help is to be expected."

Griffing and Franz in a study of the conditions of fatigue in reading (*Psychological Review*, Vol. I.) reach the conclusion that size of type is the all-important cause of visual fatigue.

Weber investigated the relation of the size of type to legibility by finding the maximum rate of reading. He arrived at the paradoxical result that although rate of reading decreased for very small type, it also decreased when the height of letters was over 2 mm. (Quoted by Griffing and Franz.)

Griffing and Franz found that it takes on the average about $\frac{9}{10}$ as much time to read large type 1.8 mm. as to

read small type .9 mm. The difference in legibility would probably be much greater were it not for the fact that when the small type is received, more words can be seen simultaneously. In this way we may explain Weber's paradoxical result. As the size of the letters increases beyond a certain limit, the rate of reading will necessarily decrease; but this does not involve an increase of fatigue, as Weber assumed.

Tests made by Griffing and Franz on time exposure showed that the large type 1.6 mm. requires about $\frac{3}{4}$ as great a time of exposure as the small type of half the height, .8 mm.

Shaw in his "School Hygiene" makes the following requirements (quoted by Huey, "Psychology and Pedagogy of Reading," p. 416): —

"For the first year the size of the type should be at least 2.6 mm., and the width of the leading 4.5 mm., as shown in this example: —

"'Then there is a turn in the road.
The long train runs over the bridge
and swings round behind a hill.
The children cannot see it now.'

"For the second and the third year, the letters should not be smaller than 2 mm., with a leading of 4 mm. Some of the more carefully made books for the

second and third years are printed in letters of this size, as shown in the following example: —

"'She must climb the tree. She held on, first to one branch and then to another, and tried to reach the golden plums. Her hands, her face, and her feet were scratched and torn by the thorns. Try as hard as she could, she,' etc.

"For the fourth year, the letters should be at least 1.8 mm., with leading 3.6, as follows: —

"'On the way down, an Indian who was in a canoe stole something from the ship. One of the crew saw the Indian commit the theft, and picking up a gun, shot and killed him. This made the other Indians very angry, and Hudson had several fights with them.'"

Huey favors a little larger type than this for the third and fourth grades.

Griffing and Franz make the lowest limit for the size of type in common use, 1.5 mm.

On theoretical grounds it may be assumed that the legibility of letters decreases with increasing complexity of structure.

Weber found that for low intensities the rate of reading varies with the illumination. Griffing and Franz conclude that within wide limits such as that of ordinary daylight, variation in the intensity of illumination is not attended by great fatigue. But when the illumination decreases to a certain point, not far from 3 candle-meters, the fatigue becomes excessive. Cattell found that *fatigue increases very rapidly as the illumination decreases below approximately* 4 *candle-meters. Very low intensities, less than from* 3 *to* 20 *candle-meters, are sources of even greater fatigue than small type, and* 100 *candle-meters may be considered a safe limit.*

White light rather than yellow should be used for artificial illumination.

The use of artificial light has long been recognized as an important cause of visual fatigue; but Griffing and Franz conclude that with sufficient intensity of white artificial light, the legibility of printed matter may be as great as in good daylight. Gaslight and lamplight have, in addition to their frequent unsteadiness, the disadvantage of a yellow color. Time-for-exposure is considerably longer for gray-tinted paper as well as red and yellow paper than for white.

Summation at this point shows the following interesting facts:—

(1) Eye movements in reading are composed of a succession of fixations and connecting movements.

(2) Seeing takes place during fixation, or when the eye is still.

(3) The number of words fixated per pause is about 1.5.

(4) The average number of fixations per ordinary line is from 5 to 8.

(5) There is a tendency to fall into a rhythmical recurrence of the same number of pauses per line and a uniform method of time distribution.

(6) The smaller the visual area, the clearer will be the fixation.

(7) A larger amount can be fixated when words are in connection.

(8) Re-fixations occur most frequently at the beginning of the line.

(9) Short lines are more easily read than long lines.

(10) The word is perceived through its high relief or "domineering letters."

(11) The upper half of words gives most points of high relief.

(12) Some letters are more quickly perceived than others.

(13) The definite "fixing" of the letters in a word occurs only through a grasp of meaning. "The letter complex is seized on by the eye but established through the sense."

(14) The first part of the word influences perception most strongly.

(15) The length of the word is not an important element in its recognition.

(16) Everything that affects legibility is an important factor in the perception of words.

(17) Lines should be of uniform length: a line one third longer than an ordinary newspaper column is a favorable length.

(18) The size of type in ordinary use should not be less than 1.5 mm. For children it should be larger.

(19) Illumination should not decrease below 4 candle-meter.

(20) Artificial light should be white: paper should be white or cream-white.

XX.

CONTRIBUTIONS OF RECENT PSYCHOLOGY (CONTINUED)

THE problem of rate in reading has received a good deal of attention with some surprising results. Dr. J. O. Quantz in his study of "Problems in the Psychology of Reading" (Monograph Supplement to the *Psy. Rev.*, Vol. II., No. I.) experimented with the purpose of determining "*what are the factors that make a rapid reader.*" Does rapidity depend on mental capacity, alertness of mind, quickness of visual perception, amount of practice — or any or all of these? What sensory type of persons obtains and retains most — those who gain their knowledge through the eye or through the ear?

Quantz found that a half second exposure of a word was more advantageous than one second, and one second more advantageous than two seconds.

"It was found by Cattell, Goldscheider, Müller, Quantz, and various other experimenters that when printed matter was exposed to the eye for a very short time, about one-hundredth of a second, more could be read, or the same amount could be read more easily, than when the exposure was longer." (Huey, "Psychology of Reading," p. 54.)

Quantz considered the shorter time relatively more favorable because (*a*) of positive after-images, (*b*) primary memory images, and (*c*) less overlapping of mental process. These after-images practically lengthen the

exposure time. *The overlapping of processes he considers an important factor.*

Huey tested the reading rate of 28 pupils in reading "an interesting novel." He found the results to range in rate "from an average of 2.5 words per second for the slowest reader to an average of 9.8 words for the fastest, when reading silently at the ordinary rate." When the silent reading was at maximum speed, the rates ranged from 3.5 words per second for the slowest, to 13.5 words for the fastest. In reading aloud, the average of the slowest reader was 2.2 words per second, and that of the fastest 4.7 at the ordinary rate. This shows a marked difference between the *rate of fast readers and slow.* Dearborn found that for a given class of reading matter *the fastest reader read more than three times as fast as the slowest.*

Quantz found a greater variation in rapidity "between the most rapid and the slowest in sentence reading than in the other tests (for isolated words, color and form)." He found that there is less difference between the slowest class in the different types of perception than between the most rapid. There is more difference between the good and the very good than between any other two groups. Dearborn found the same wide difference between good and very good in rate; "subject 3 reading on an average one third more words in a given time than subject 4." "This is the common observation," says Quantz, "that those who are exceptional in anything are farther removed from the merely good than the latter are from the average."

"It might be supposed that great rapidity was gained at the sacrifice of intelligence," says Quantz. This

supposition is negated by an examination of the amount and quantity of the material reproduced. A comparison between the ten most rapid readers and the ten slowest shows *that the rapid readers remember more of the original thoughts, and that the character of their reproduction is much higher, both generally and with reference to expression and logical content.* In quality the percentages are 47.8 for slow readers, 60.3 for fast. The percentage of thoughts reproduced by slow readers was 14.9, by rapid 24.4.

Quantz found that words in connection were read one half faster than isolated words. "In the continuous reading the thought introduces a thread of connection between the succeeding words, and thus a readjustment of attention in passing from one word to another is not required."

Huey remarks that in almost every case in which a large amount is read, "*far more is read to the right of the fixation point than to the left.*" This shows that not only is the general movement of visual perception forward, as Dearborn has shown, *but the assimilating process seems to move forward, following the visual perception of words and reacting into it and regulating it.*

Quantz found that in reading isolated words the substitutions were of those similar in appearance, while in sentence reading the substitutions were of words similar in sense. These errors are not due to mere guessing; the subject "sees" what he reads, as has been noted by other observers.

It is an established fact that the memory span is much greater when words are in connection. Ebbinghaus found that the memory span was considerably greater

when the words to be repeated were grouped or uttered rhythmically. So Dearborn found that his *readers tended to establish a rhythmic succession of pauses and that this grouping was friendly to the reading rate.*

Lip-movement in any degree is detrimental to the reading rate, and the stronger the tendency, the greater the hindrance. Quantz found that his ten slowest readers showed almost double the amount of lip-movement of the ten most rapid. Not one of those whose reading fixation was widest was a lip-mover to any extent which could be observed.

Quantz concludes that "lip-movement in silent reading is not an acquired habit, but a reflex action, the physiological tendency to which is inherited. It is not 'second nature,' but essentially first nature; not something to be *unlearned* but to be *outgrown*. It is a specific manifestation of the general psycho-physical law by which every mental state tends to express itself in muscular movement."

"The child in learning to read does not learn to move his lips. The lip-movement is most decided at the very beginning, and grows less so as he becomes conscious of it and controls it voluntarily."

"Many persons say that though not habitual lip-movers, they do move their lips when giving very close attention." "This means simply that we regularly inhibit these vocal reflexes, but that when our whole attention is given to the thought under consideration the watchfulness over these motor tendencies is relaxed. It is true also that these tendencies to vocal movement are stronger, and hence more likely to find an outlet, when the corresponding mental processes are more vivid.

This follows from the general principle, experimentally demonstrated by Féré, that 'the energy of a movement is proportional to the intensity of the mental representation of that movement.'"

Quantz considers *eye-mindedness* to be rather a strong factor in determining reading rate; he thinks that "in reading at a maximum rate we employ the visual process almost exclusively." So Dearborn thinks that "an important cause of slow reading may be the excess of the auditori-motor accompaniment of repressed articulation, which is another way of saying that the assimilation process is slow."

What is the relation between eye and voice in reading aloud? Quantz found that much depended on the position in the line. "When a reader is pronouncing a word at the beginning of a line, the eye is on an average 7.4 words in advance of the voice; in the middle, 5.1 words; and at the end, 3.8, giving an average of 5.4 words. Thus *the space between the eye and voice is very elastic, expanding and contracting with each line*, but *with a uniform regularity*, except indeed when special conditions are introduced; an unfamiliar word, for instance, would decrease the distance to zero, or a familiar phrase might increase it a dozen words, — after the long pause, which a period allows, the eye lengthens its lead of the voice."

Dearborn found that there is not only a decrease in the length of the pause in rapid reading, "but this decrease is not made equally in all parts of the line. It occurs chiefly in the last half of the line, and in fact not only is the time of the first fixation not decreased, but there is a slight increase in both the average and total

time spent in the initial fixation." He thinks that the method of motor functioning in rapid reading is that of a long first fixation followed by one or more much shorter fixations.

"The ease of the formation of motor habits," says Dearborn, "seems to be one of the characteristics of rapid readers as contrasted with slower readers. The motor habit once acquired tends to persist."

"The direction of attention after the first pause would be always in the line of the eyes' advance — it is more in accord with the facts to suppose that in all fixations the perceptive process is generally concerned with the matter lying on either side of the point immediately fixated, and that when the first pause is longer than the average of the other pauses in the line, it denotes a more general survey of the whole line." "The facts justify the conclusion that the attention is much more widely distributed at some pauses than at others — of this there is really no question." Dearborn's hypothesis is *that the rapid reader distributes his attention more readily at the initial fixation of the line*, and is enabled on this account to fall more easily into a uniform habit of movement.

Quantz considers quickness of perception an important factor in deciding the rate of reading. "It might be added as a particular verification of these general conclusions," says Quantz, "that by far the most rapid reader of all those tested is a young woman whose extent of reading is exceptionally broad, and who possesses a strong tendency toward eye-mindedness, a marked power of mental concentration, and intellectual ability of a high order — all of which have been found

to be positive factors contributing to rapidity of reading."

The familiarity of the reader with the thought and language is a subjective influence which operates in determining the distance between eye and voice.

Quantz thinks that those who are rapid silent readers read farthest ahead of the voice in reading aloud, and if a certain considerable distance between eye and voice is a condition of intelligent and intelligible reading, rapidity is an advantage.

"Does comprehension keep pace with visual perception or does it lag behind?"

Quantz believes that it lags behind.

Pillsbury found in his tests that recognition of isolated words came "in a flash" and lagged behind their visual presentation. ("A Study in Apperception," *Am. Jour. of Psy.*, Vol. VIII.)

This goes to justify Zeitler's distinction between visual perception and apperception, the first being the function of the physiological-optical apparatus, the last of the attention.

Word perception tends to become a mere reflex activity, the mind occupying itself with meaning. This is shown in the tendency of subjects to find a meaning for every group of letters, and in their slowness in grasping nonsense letter groups. It shows, too, in the subject's feeling of indifference for nonsense forms and in the fact that the unknown word appears to him as a combination of meaningless letters, and most of all by the fact that with practised readers, rate is largely regulated by the apperception of meaning.

"There is strictly no such thing," says Dearborn,

"as a distribution of attention to disparate and unassociated things; such distribution is a psychological and logical impossibility. There is plenty of evidence to show that when the eye is reading in one line the mind is vaguely conscious of matter lying in the succeeding lines." "To answer, then, the question as to what determines the location of fixation pauses, it is first and principally the unit of apperception. A new fixation is made for each new unit of perception." "The slow readers have a narrower span or working extent of attention."

We read ahead of the voice; only so could oral reading be the thing it is, viz. interpretation of thought.

All writers agree that through practice the span of attention may be increased. Says Dearborn, "A habit of slow, methodical plodding is often easily fallen into which varies little, whatever the sort and importance of the reading, but which allots to whatever is read, if it is of ordinary difficulty, about the same amount of time and attention, line by line and sentence by sentence. It often seems, for example, that the careful dwelling upon each word and phrase, which is the daily method of the classical student throughout many years of study, helps not a little in fixing such a habit of slow assimilation. Long, continuous application, in which the attention remains uniformly of a medium intensity, is seldom alert and selective, or never reaches its highest pitch or its lowest, is little suited to the formation of a habit of attention adapted to an age of newspaper and ephemeral books. What may be called speed tests ought on this account to have some place in school methods of teaching reading as well as in other sub-

jects in which alertness of attention is demanded and cultivated."

"One who reads rapidly in a given style and class of subject-matter," Dearborn concludes, "will read somewhat proportionately faster than a slow reader, whatever, within certain recognized limits, the nature of the style and subject-matter."

Summary

(1) More can be read with a relatively short time exposure of the printed words.
(2) The difference between fast and slow readers is as one to three, or one to four.
(3) There is more difference between the good and very good than between any other classes.
(4) Fast readers excel slow ones in grasp of content.
(5) The assimilative process is slower with slow readers.
(6) Fast readers establish a rhythm; the long pause comes near the beginning of the line.
(7) Words in connection are read more rapidly than isolated words.
(8) Lip movement in any degree is detrimental to the reading rate.
(9) "Eye-mindedness" is friendly to rapid reading.
(10) The direction of attention is in line with the eyes' advance.
(11) Comprehension of meaning lags behind visual perception.
(12) In oral reading, comprehension of meaning is ahead of the voice.

(13) A new fixation is made for every unit of apperception.
(14) Slow readers have a narrower span of attention.
(15) Through practice the span of attention may be increased.
(16) A rapid reader in one style of matter reads more rapidly in any other style.
(17) A rapid silent reader is a more rapid oral reader.

XXI.

READING A PROCESS OF THINKING.

NEW aspects important for reading have been developed from both the Psychological Laboratory and from practical experience. These all point to the great fact that *Reading is a process of Thinking.*

There is abundant evidence to show that the process of learning to read involves: —

(1) The development and control of a complex set of eye movements that must become reflex or automatic in character.

(2) The development of power in the reflex perception of words.

(3) The development of a specialized mode of thinking through the functioning of written or printed words. This *is* reading.

The book makes an immediate demand on the eye for a finer set of muscular movements and coördinations than that of any other school activity whatever that does not involve the use of the microscope. It asks that the child develop power in making sustained series of rhythmic fixations and intermediate, well-directed "sweeps" broken at regular intervals by long backward sweeps which must terminate accurately in a fixation near the beginning of a new line.

The accommodation of the eye is taxed to the utmost.

The delicate ocular muscles must be brought into a sustained activity of a sort to develop habits of accurate and rhythmic eye action that belong to the class of "acquired reflexes" and that must, therefore, function automatically and swiftly.

No previous demand on the hand made by over-small kindergarten material equals the exacting demand of the primary school in reading. While we have been rightly subjecting the Kindergarten to the most searching criticism on account of the great strain put on hand and eye by over-fine work, we have all the while been overlooking a muscular overtaxing in the school that is vastly greater. One has but to estimate the strain put on the muscles of accommodation in fixating the fine print and following the broken lines of most "beginner's" books to realize this.

There is only one remedy for this. *Reading must begin later.* The argument for beginning later has been made from the standpoint of mental development. We make the child a passive, receptive, bookish being when every demand of his own nature asks that he should become an active, freely observant, motor being.

And as if the reading process were not sufficiently complex, we have tacked on to it oral or expressive reading.

As a result, we have multiplied eye-defectives, made our schools, in the language of A. Melville Belle, "nurseries of stuttering," and turned out multitudes of people who will never learn to read, so fixed has become the arrestive habit of word pronunciation.

Those schools that allow the child to follow his own instincts, where instinct is intelligent, are undoubtedly

working on the right lines. The child who is beginning to use the book has the tendency to "keep the place" by moving his finger along the line, thus falling back on the eye-hand coördination for help. This tendency should not be interfered with in the first weeks or months of reading work. It will probably disappear naturally as the eye becomes accustomed to the work.

The whispered utterance of the word is also a natural tendency at the beginning. *If it is not allowed to lead to a habit of lip reading*, it is undoubtedly helpful. It seems to afford a natural motor outlet at the beginning for an unnaturally exacting silent process. Only experiment and observation can test its value.

I have seen a beginning class vigorously whispering the words to themselves, the first finger moving from point to point in the line with the eye, until a sentence was read, when some child gave it orally with ease and fluency and usually without depending on his finger for help.

Professor Dearborn discovered by experiment that the repetition or re-reading of a thing greatly increased the ease and accuracy of eye movements.

Proper lighting of rooms; books printed on paper of a requisite color and thickness; lines not too long and of the greatest possible uniformity; type of the right height, with sufficient leading, and in a style of lettering characterized by simplicity of form and the absence of hair lines, — all these things must be demanded of bookmakers as the child's absolute right.

In the reading of an adult, word perception is a reflex process that goes on automatically. *Consciousness fo-*

cuses in the central process of thought getting which is apperceptive in character. This thinking process, which is reading, is accompanied by a complex reflex functioning: —

1. Of the eyes — purely ocular.
2. Of brain and mind in word perception — marginal in consciousness.

These are tributary to

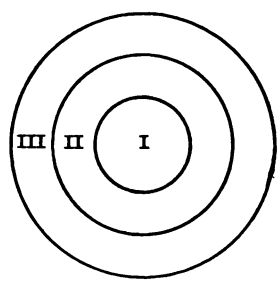
3. The ideational activity, the "attention span" central in consciousness.

This is illustrated by the accompanying diagram.

I. Active consciousness. Ideational activity. Reading proper.

II. Diffused consciousness. Word perception.

III. Subconsciousness. Eye movements, holding book, turning pages, etc.



THE FIELD OF CONSCIOUSNESS IN READING.

Everything involved in II. and III. of the above diagram should be *marginal in consciousness during the reading process:* no effective reading is possible when this is not true. This means that in all beginning classes there must be training for *reflex action: First*, in securing the best *ocular habits:* in eye sweeps and in accurate, rhythmic, rapid fixations. *Second*, beginning classes in reading must be educated in the accurate perception of words. We must train children who will *see* words in the unconscious reflex way in which they

hear words. We listen for *meaning* when we hear: Auditory word perception is a purely marginal activity.

This means that the child's vocabulary of written words must be so familiar that it can be used with accuracy and speed and without enlisting the direct attention which must be absorbed in carrying on the thought development.

All spelling methods of mastering words, either by letter, sound, or syllable, are valuable only as they aid in this reflex perception of words, as it goes forward in reading proper.

Zeitler and others have proven that in reading proper, words are recognized *through their content.* Where the word stands in logical connection with other words, its meaning establishes its final identity.

The value of all analytical devices that help the child to a written and printed vocabulary of words must be finally measured *in the reading hour* and not in the period of the word drill. For the question is not, Can the child quickly *pronounce* this isolated word or accurately reproduce it in writing; the question for reading is this: *Can the child perceive this word in such reflex wise as to make its content an efficiently operative factor in a thinking process?*

This precisely parallels the standard for the spoken word. No one would suppose for a moment that because an individual could pronounce a word correctly he could therefore make efficient use of it in conversation. His *command* of the oral word would rest finally *on his power to use it in thinking;* and by using it in thinking to make it an instrument in the oral expression of thought.

It has in no wise been proven that phonic analysis may not help in such reflex power over printed words. But its ability to help must rest on the fact that it *releases the consciousness of the child in the reading hour from word forms*, so that it can be *put on content or meaning.*

The word drill must so challenge the outer vision of the word that in the reading hour the child will be intent on the inner vision or meaning. In other words, it must perform the paradoxical task of helping him to see *form* so accurately that a little later he can *forget* form.

All training in reflex functioning means this: establishing automatic activities of the habit sort that will take care of themselves and so free the mind for something else.

Exercises in the quick recognition of word families and groups, through a ready grasp of a familiar prefix or suffix, tends to strengthen the habit of fixing the eye on the *determining* syllable or *domineering* letters that make its high relief, and all training that helps forward the quick, unconscious grasp of words in this way helps in the reading process proper.

For the practised reader is one who has become an expert in perceiving words through their determining syllables, in grouping words into phrases and clauses and recognizing familiar phrases and clauses as wholes. Such a reader has made word and sentence structure a means of helping forward perception. Without such power over structure no one can read fluently.

But all work in word and phrase analysis should remain an exercise separate from reading proper where *synthetic grasp of thought* is the order.

Work in phonics should not load words with diacritical marks which make the word form more complex and are a hindrance to its quick recognition.

Rate is an important matter in all reading work.

Word drill should be rapid.

The rate of reading should be kept up to the maximum power of each pupil. How rapidly the process of reading can go forward is an important question for the reading hour.

The habit of dragging over the work opens the door to divided attention and the overlapping of processes. No more important contribution has lately been made to the reading problem than this: *That the best readers are the most rapid readers.*

All experimentation goes to prove that the reading rate is a factor of first importance. Let the reading period be shortened if need be, but see that the work moves swiftly and with keen insight directed to meaning. All this means that oral reading, especially at the beginning, should be the exception and not the rule.

The unwisdom of giving undue prominence to oral reading has already been discussed. (See Chapters XI. and XII.) If one is ever to become a good oral reader, he must become an expert in getting thought both in the main import and in the finer shades of meaning, many of which the voice alone can express. The thought process largely determines rate in reading, and it must determine almost wholly the character and excellence of oral expression. The central apperceptive process must get some vigor and headway before it can naturally pass over into expression. For this reason

the child who has become most absorbed in the thought is the one who is best ready to read orally, and he will do it with greatest safety to himself.

That premature and over-much oral reading tends to cut out the central thought process cannot be doubted. So Superintendent F. E. Spaulding, in his excellent monograph on "Preventing and Correcting Defective Reading" (New York Teacher's Monographs), points to the fact that "pupils readily fall into the habit of associating the visual image directly with the vocal-motor word series to the exclusion of the thought series *at any stage in their progress, but the beginning is usually made in the early lessons.*"

Very much of the mere elocutionary reading is of this type.

It may be safely affirmed that until truer ideals of oral reading become general, reading aloud will continue to be a menace to the formation of correct reading habits. One has only to listen to what is commonly applauded as good oral reading to discover what shallow standards are in vogue. *Oral reading is good when it is a natural and largely unconscious reflex expression of the central apperceptive process.*

All interference with reflex processes, all attempts to control them *directly* from the higher centres, results in defective functioning of some sort. Any reflex process is to be left a reflex. Only that *indirect* control that ensues through enhanced central functioning and guidance can aid it. To read aloud well, one must think about the *what* and not the *how* of reading.

Any method of *teaching reading* must recognize the fact that reading is a process of thinking. That this

process of *thought getting* or *apperception of meaning reacts into* and *controls all minor or reflex processes.*

The following well-established facts will aid the teacher of reading: —

(1) In reading, the word is recognized as a whole *through its meaning in the context.* This means that it slips into the thinking process as a constituent factor; it exists solely for the sake of its meaning in a particular thought sequence.

(2) *The unit* in reading is the sentence; the reader *grasps sentences in their unity* and words through their sentence relation, which is their *thought* relation.

(3) *Meaning* is an important factor in determining the unit of fixation.

Twice as many words may be grasped when they are given in connection: *the thought process reacts into visual perception and quickens and controls it.*

(4) *The Control Factor in Reading is the Thought Process.*

Any acceptable method of teaching reading must contribute directly to the learner's power of grasping thought through the functioning of visual words.

A method in reading must be based on the central fact that reading is a process of thinking. Conducting a reading lesson is conducting, controlling, shaping, helping forward, a process of thinking that is going on in the mind of each individual in the class. *The author* of the selection read is in primary control of this thinking process; not the teacher's thought but *his* thought is doing the important work of determining the imagery and the apperceptive processes of the class. The teach-

er's whole value is measured by her power in helping forward this thinking process. Sometimes she will do her work best by a method of silence and non-interference; sometimes by a word, or question, or illustration which will help forward the apperception of meaning.

The whole value of the reading process for the individual depends on what this reading process brings him. And *all normal incentive in reading rests in the promise that the thing read will have significance for the reader:* that it is something which will in some way augment his present every-day existence by imparting new insight and the pleasure that new insight brings.

The learner's interest in what he reads is the normal and constant incentive which stimulates the reading process.

Interest centres in the content.

The teacher in every grade has two great things to do: —

(1) He must put into the learner's hands something that is suited to him.

(2) He must make use of interest in developing more interest: in other words, he must gradually and steadily widen the range of interest until it includes the vital things in literature.

The school of the future will make reading a chief means of developing the active receptive powers which make for intelligent insight and efficient will. It will make it a means of developing efficient thinking, of developing a habit of holding intercourse with best minds.

By carefully selected material, by adapting procedure to the needs of the learner's *present life and work*, it will

make reading help powerfully in the development of virile, vital ideas that will react into every-day life and action. (See Appendix I (A) and I (B) on Correlation of Reading with other Studies.)

Control of all the motor activities lies on the side of the intelligence, on the judging, apperceiving, imaging powers; on the emotional response, and on the *habit of carrying the most efficient thought forward into some form of expression.*

The school of the future will make reading an important means of widening the learner's intellectual horizon in a way so vital that it will influence *his present action.* It will give him a habit that will help directly in making him an actively intelligent being and *keeping* him an actively intelligent being.

The public school should put the yellow journal out of existence, through the formation of a vital reading habit.

Passive book culture must give place to active book culture if it meet the demand of this essentially motor age.

The study of the Reading Problem has been confined too exclusively to lower grades. That reading is a process of thinking has now been proven by psychological experiment. The development of this thinking process into an efficient habit must be secured in grades above the primary, where the habit should be well initiated. Until the Reading Problem be extended to higher grades, the school will never be secure in its great work of making readers.

APPENDIX I.

A

THE following quotation describes an experiment begun in Boston in October, 1881:[1]—

The aim of the experiment was to see if the child may not be introduced at once to the foundations of all learning,—the natural and physical sciences, mathematics, literature, including language, and history,—and at the same time be given a mastery of such elements of reading, writing, and number as usually constitute primary education.

The experiment began with nine children between the ages of five and a half and seven years. With scales and measuring rod each child was weighed and measured, while such questions were asked as, "Have you been weighed before?" "When?" "What did you weigh then?" "How does your weight to-day compare with that?" The shyest children forgot they were at school and chatted freely while watching and comparing results. By questions as to why a present weight or measure was greater than a former one, the statement "Children grow" was obtained. Questions about the causes of growth led to the statements "Children eat," "Children sleep," "Children play." A question as to whether anything besides children grows

[1] Quoted from Chapter I. of "An Experiment in Education," Mary R. Alling-Aber. Published by permission of D. Appleton & Co. See also the *Popular Science Monthly* for January, 1892.

started a talk about animals, in which were given the statements, "Animals grow," "Animals eat," "Animals sleep," "Animals play." In like manner statements about plants were obtained. The children were easily led from thinking of a particular child, animal, or plant to the general conception and the use of the general term. This was the first lesson in natural science.

To recall the first general conception reached in the science lesson a child was asked, "Nina, what did you say children do?" "Children grow," she replied. I said, "I will put upon the blackboard something that means what Nina said," and wrote in Spencerian script, "Children grow." In response to invitation the children eagerly gave the general statements gained in the science lesson. Each was written upon the board and read by the child who gave it. They were told that what they had said and I had written were sentences. Each child read his own sentence again. This was the first reading lesson. [*Descriptions of the first writing, number, and geography lesson follow.*]

After recess each child read his sentence, wrote it once, and then the subject of the science lesson was pursued further. After special answers to the question, "What do children eat?" the general statement was obtained, "Children eat plants and animals." Similarly, the children were led to give "Animals eat plants and animals." Then came the question, "What do plants eat?" One suggested the sunshine, another the rain, another the air, others the ground or dirt, for which the term soil was given. It was concluded that rain and sunshine help plants to grow, and that some of their food must come from the soil; and the general

statement was given, "Plants get food from the soil." Then I asked, "Where does the soil come from?" Before wonder had given way to opinion I said, "If you bring luncheons and extra wraps to-morrow, we will go to the country and try to find out where the soil comes from." A poem of Longfellow's was read, and the children were dismissed.

On the second morning the children came bounding in before nine o'clock, eager to find and read their sentences, which each did without hesitation; and until nine o'clock they amused themselves finding and reading one another's sentences, teaching and challenging in charming style. A few minutes later we started on our first field lesson in science. An hour's ride in street-cars brought us to the open country. We went into a small field where a ledge of rock presented a bold front. "Children," I said, "an answer to our question is in this field. I wish each of you to find the answer for himself, to speak to no one until he thinks he has found it, and then to whisper it to me."

The sun climbed higher, but I waited until the last child brought me that whispered reply. Calling them together, I said, "You have all brought me the same answer. Why do you think soil comes from this rock?" They turned to the ledge, picked off the loose exterior, and showed me the same in masses at the base. "How do you know that any plants can get food from this soil?" I asked. Instinctively they turned to the cliff; there were grasses and weeds growing in the talus at the base, and in crevices all up its front and sides; these they pulled, and showed me the roots with the rock soil clinging to them.

On the third day, after reading the sentences already on the board of which each child besides his own read one or more others — the following sentences were easily elicited : —

"Children eat plants and animals.
Animals eat plants and animals.
Plants get food from the soil.
The soil comes from the rock.
Rock decays to make soil."

These were written on the blackboard, read, and copied by the children as on the first day. This was the natural science, reading, and writing of the third day.

In the fifth day's science lesson the children were led to speak of rain and wind as washing and blowing off the decayed rock and exposing fresh surfaces, and so increasing the decay, and to give the following summary : —

"Without decay of rock there would be no soil ; if no soil, no plants, no animals, no people." In reading they had seventeen sentences, which they read without hesitation and wrote with some resemblance to the originals.

Throughout the three years reading was taught as in the first week. When there were enough sentences to make a four page leaflet of print, they were printed and read in that form.

No effort was made to use a special vocabulary, to repeat words, to avoid scientific terms ; there was no drill in phonics or spelling ; no attention was given to

isolated words as words — a thought was the unit and basis of expression.

During the first year a little reading matter was drawn from lessons in literature and history. This was gradually increased during the second and third years. Still the sentences for reading were taken chiefly from the science lessons, because there could be more certainty of the child's having accurate and well-defined ideas as the basis of each expression, and the sentences could be more completely his own. In March of the first year reading books were introduced. At the first trial they took Swinton's "Easy Steps for Little Feet," and in twelve minutes read a page-and-a-half story. Of their own accord they sought and independently obtained from the context the meaning of all but two of the unfamiliar words, and gave to express the meanings either the exact words of the book or synonymous ones, for which those of the book were substituted. After this they read from books, whenever such reading could be related to their other work, not much otherwise.

B

INDIAN SHELL WORK.

Yesterday we saw in the museum some shells cut by the Indians.

Some were shaped into spoon forms: some were sharpened for cutting.

A very few large conchs had been cut through and the spiral centre removed. These made bowls.

We saw a clay vessel that looked as if it had been made in imitation of a shell bowl.

Some of the shells were carved into beads. Some were cut into ornaments for the hair or breast.

The shells were so much prized by the Indians that great labor was put on them.

They were so much prized that they were buried with the dead.

Because the shells were valuable to the Indians and easily handled, they were used as wampum.

We saw some pictures of beautiful wampum belts.

Kablu, the Aryan Boy.

(See "Ten Boys from Long Ago till Now," by Jane Andrews.)

To-day for the first time, we moulded vases in clay.

Afterward Miss West read to us about Kablu, the Aryan boy.

Kablu made large jars of clay. These were baked and were used for carrying water and for holding food.

When he and his father rebuilt their house they needed something to keep the rain from coming through the roof. Kablu learned to make tiles of clay. His father used these for covering the roof of the house.

I think he would not have learned to make the tiles if he had not noticed that water would not run through the clay.

We found the Hindoo Koosh mountains where Kablu lived.

Then we found the great plain of the Indus where his people went because the land there was better.

We think they were a brave people, they were like the Pilgrims who first came to our own country.

C

Along with Nature Study the material drawn from the social life of the community or school, or the study of other peoples, should find a growing place in the reading of children.

Especially in the city, the museum, factories, and various manufactories should become fields of observation and afford material for subsequent expression in language and reading.

Industrial life in the society about him presses on the city child's observation, and he should be helped to an intelligent perception of it.

The teacher who learns to make use of standard sources of material which she will find in any good public library will find herself growing deeply interested in such work.

Collections of Indian basketry, of primitive tools, of native decorations, of Indian pottery, etc., are invaluable material in leading the child into an appreciation of simpler forms of industrial life about him, as something that has grown up slowly through many ages.

In order that such lessons represent a sequence in which there is a real progress, the teacher must become an interested student with the class and learn to value the accuracy of facts as the first condition of success.

Such work will open valuable vistas in History and Geography; above all it will lend significance to the child's own industrial life and form a necessary basis for an intelligent appreciation of the social environment in which he lives.

"The Tree Dwellers," by Miss Dopp: The New Cen-

tury Reader No. 2; and Dutton's World at Work Series — all these illustrate work of this sort that has been well done.

D

THE LIFE OF A BEAN.[1]

I. THE BABY BEAN IN BED.

I AM a little baby bean.
I am white.
I am round and smooth.
Little Nell put me in bed.
My bed is the earth.
I like the soft, warm earth.
It is my blanket.
My blanket covers me all up.
The sun loves me.
He makes my bed warm.
The rain loves me.
It gives me water to drink.
I love the good rain.
Little Nell loves me.
I love little Nell.
I shall go to sleep now.
The sun and the rain will wake me.
Do you know what I shall do then?

II. HOW THE BABY BEAN WOKE.

Good morning, Nell.
Have you come to see me?

[1] Published by D. C. Heath & Co. Copyright, 1901, by D. C. Heath & Co.

You put me to sleep under the blanket.
The sun woke me.
See, I have grown!
The sun and the rain made me grow.
My coat is torn, I have grown so large!
Do you see my leaves, Nell?
Why are your leaves folded, little bean?
They were folded in the cotyledons.
Do you know why I bend my head?
I push with my back.
Then my head is not hurt.
The cotyledons are open.
I put my head out of the cotyledons.
I put my feet into the ground.
You call my feet roots.
Soon I shall lift my head and look at the sun.

III. HOW THE LITTLE BEAN GREW.

Where is my little bean?
Here I am, Nell.
Don't you know me?
I don't see you, little bean.
I have grown so large!
That is why you don't know me.
Oh, now I know you, little bean!
Do you see my coat, Nell?
No, where is your coat, little bean?
I have grown too large for my coat.
I saw it was torn, little bean.
See how tall I am, Nell!
I don't bend now.

How high you hold your head, little bean.
Yes, I like to see the sun.
Your cotyledons have grown small.
You know what my cotyledons are for, Nell?
I keep my food in my cotyledons.
Is that why they grow smaller, little bean?
Yes, I am using the food.
Your leaves are not folded now, little bean.
They have grown, Nell.
My feet have grown, too.

IV. WHAT THE ROOT SAID.

I was a little root.
Now I am large and strong!
I am in the ground.
I hold the plant.
The wind cannot pull me up.
Do you see how many parts I have?
I call these parts rootlets.
My rootlets are very strong.
My rootlets are crooked.
I can hold firmly.
My rootlets help me hold.
See, how many little threads my rootlets have!
These little threads are root hairs.
These little root hairs help to make me strong.

V. THE BEAN STEM'S WORK.

I am long and slender.
I am smooth.
I am like a tube.

I am called the stem.
I have work to do.
I hold the leaves.
I hold the flowers too.
I keep the leaves apart.
I hold the leaves to the sun.
The leaves need the sun.
I have more work still to do.
I carry food to the leaves and flowers.
You must have food to grow, little Nell.
The leaves and flowers must have food too.
The food comes from the roots.
It goes to the leaves and flowers.
It passes through me.
I am happy in my work.
I must do it well.
Then the leaves and flowers will grow strong.
Don't you think a bean stem has much to do?
What can you do, Nell?

VI. WHAT THE LEAVES SAID.

Good morning, Nell!
We are not baby leaves now.
We are not folded up now.
See, how we are spread out!
Do you like our new dresses?
Are they not a pretty color?
The good sun helps to make us this pretty color.
What do you think we do all day?
Do you see the dear little bud where we meet the stem?
We take good care of it.

It never gets cold.
At night we bend over the bud to keep it warm.
When morning comes, the little bud says,
"Thank you, dear leaves."
Then we spread ourselves out to the sun.

There are three of us.
We all sit on one long stem.
We are folded together in the bud.
We came out of the bud together.
We are little sister leaves.
You should see us dance in the wind.
We love the wind.
We love the rain too.
We bathe in the rain.
Then the sun warms us.
All day long we work together.
Shall I tell you what we do?

You breathe the air, little Nell.
You could not live without the pure air.
We breathe, too.
We take in air for the plant.
Then the plant grows strong.
We need the sweet air.
The rain helps us.
The sun helps us.
We need the rain and sun.
The soil feeds us.
We need the good soil.
Are we not happy leaves?

See how we point to the ground.
Would you like to know why?
Do you see these little grooves?
Our veins make these grooves.
When it rains, the water runs down them.
I can hear them say, "Thank you, dear leaves."
They do not get enough water that way.
I will tell you how they get more.

We send water in another way.
Our stem helps us do it.
It has a little groove in it.
What do you think the little groove is for?
The water runs down the little groove.
Then it runs down the plant stem.
It runs to the ground.
Then the little roots have more water.
We like to help the roots under the ground.
We like to help the dear little buds too.

VII. WHAT THE LITTLE BUD SAID.

Do you see me too, Nell?
I am a little baby bud.
The leaf takes care of me.
The leaf keeps me dry and warm at night.
In the daytime it lets the sunshine kiss me.
Do you see my little stem?
Are you ever hungry, Nell?
I am hungry now.
The juice that runs through the stems brings me food.

Do you know where the juice comes from?
It comes from the roots and leaves.
Don't you think that every one is good to me?
Do you see my green coat?
It looks like two leaves folded together.
What do you think it will be?
It will be another leaf.
See my two sisters.
They are older than I.
Are they not pretty?
Their coats are in two parts.
You can see their white dresses under their green coats.
They will be flowers some day.
I can work for them then.
I have many friends.
Can you tell me their names?

VIII. NELL'S STORY.

I saw my bean plant to-day.
What do you think I found?
I found a lovely white flower!
Last night there was only a flower bud.
To-day there is this lovely flower.
I think the warm sun opened it.
The whole plant is like new.
I think it is happy over the flower.
The flower is the crown of the plant.
I could smell the sweet flower.
Will it have work to do?
I must watch and see.

IX. WHAT THE FLOWER SAID.

Good morning, Nell,
Have you come to see me?
Here I am under the green leaves.
The green leaves hide me.
Do you know me?
I have grown since you saw me.
Then I was a baby bud.
Now I am a flower.
Do you like my white dress?
Is it not pretty?
Do you see my little sisters?
They have on white dresses, too.
We live together on a long stem.
We are happy together.
We have many visitors.
The bees visit us.
The butterflies visit us.
Little boys and girls visit us, too.

We have work to do, Nell.
We help to make the world beautiful.
We give food to the bees.
The butterflies like to come to us.
Little boys and girls love to look at us.
We make them happy.
We do all this.
We do more work yet.
That work is a secret now.
Watch us for a few days, dear Nell.
Then you will see something wonderful.
Then you will know our beautiful secret.

How pretty you are, dear Flower.
I like to look at you.
You make me happy.
You are very small.
You look like a tiny butterfly.
Your dress is soft and white.
You make the whole bean plant look beautiful.
How the plant must love you!
I will take care of you.
I will watch you every day.
I shall try to find out your wonderful secret.

X. THE BEAN PLANT'S FRIENDS.

Good morning, Sun.
I see you are looking at me.
I love you, Sun.
You are so good to me!
You keep me warm and make me grow.
I shall look at you all day long.
You are so bright!
Are you here, too, Nell?
I did not see you.
I was talking with the sun.
Do you see him, Nell?
He loves me, Nell, and he loves you, too.
I like you, Nell, for you bring me water.
You and the sun are my friends.
O, how it rains!
You are good to me, Rain.
Good-by, dear Sun.
I cannot see you now.
I like you, Rain.

You make me grow and you make me happy.
I have three friends, — the Sun, Nell, and the Rain.
I like all my friends.
They are all good to me.

XI. THE POD'S STORY.

You all know me.
I am a pod.
My work is to care for the baby beans.
Little Nell says I look like a cradle.
My baby beans live in this cradle.
See how happy they look!
I am not like most cradles.
I can rock in the wind.
I am held in place by a short stem.
Each baby has a place.
A few days ago we were green.
Now we are yellow.
I saw little Nell pick a pod from this plant.
You may pick me soon.

XII. THE BEAN SEED'S STORY.

Little Nell has picked us.
We have left our cradle.
It is brown and dry.
We are bean seeds now.
All summer the good bean plant worked for us.
It worked every day.
Its stem grew high and strong.
Its roots grew long.
Its leaves spread out.

Its buds grew to be flowers.
When the flowers were gone, Nell found our cradles where the flowers had been.
The dear bean plant was our mother.
When we were ripe, Nell picked us.
She will keep us safe all winter.
In the spring Nell will plant us.
Then we shall begin our work.

REVIEW.

Who are we?
I am brown.
I have many small threads on me.
Do you know the name of these threads?
I take food from the bean plant.
The soil and the rain give me food.
I hold the plant in the ground.
Then the wind cannot blow it away.
Do you know my name?

I wonder if you know me!
I am broad and green.
I breathe for the bean plant.
I cover the baby buds at night.
Then the cold cannot hurt them.
I bend when it rains.
Then the rain-drops must fall to the roots.
I am heart-shaped.
Who am I?

I like the sun and the sun likes me.
I turn to the sun.

The bees like me.
Boys and girls like me, too.
I am white.
But I do not wear my white dress long.
I help the plant to be beautiful.
I help to make the pod.
What is my name?

I am long and slender.
I am shaped like your pencil.
I am not strong.
I cannot stand alone.
Sometimes I climb up a stick.
Sometimes a string helps me to climb.
I have work to do.
Nell has work, too.
My work is to hold the leaves up.
I hold the flowers up, too.
I carry up food to the leaves and flowers.
Do you know me?

I am a little green house.
I am shaped like a boat.
I take care of the bean babies.
I keep the rain out.
I keep the babies snug and warm.
When they have grown, I open my doors.
Then little Nell takes them out.
Sometimes the wind blows them out.
Sometimes I snap and throw them out.
Then my work is done.
Have you ever seen me?

I am round and smooth and white.
Within my coat are two cotyledons.
Between my cotyledons is a baby plant.
The bean plant worked for us all summer.
The winter is cold.
I must wait for spring.
In the spring I shall be put in the warm earth.
Then the baby plant between my cotyledons will grow.
Who am I?

THE LITTLE PLANT.

In the heart of a seed,
Buried deep, so deep,
A dear little plant
Lay fast asleep.

"Wake," said the sunshine,
"And creep to the light;"
"Wake," said the voice
Of rain-drops bright.

The little plant heard,
And it rose to see
What the wonderful
Outside world might be.

(KATE LOUISE BROWN, in the "Child's World.")

By permission.

APPENDIX II.

"SUCH fairy tales show in intelligible form the eternal battle which is the inheritance of humanity — the battle between good and evil; and they plant in the young child-heart the beautiful faith that good is certainly stronger than evil; that he who holds fast to the good need not fear evil. Now the child looks with glad hope into the future of his boundless, shining life and thinks, 'When I am large I will do as the good fairy does.'" — *Herder.*

THE SWEET BROTH.

TRANSLATED FROM THE GERMAN OF JACOB AND WILHELM GRIMM.

Once upon a time there was a little girl who was very poor and who lived all alone with her mother, and one day she had nothing to eat.

So she went out into the woods, and there an old woman met her who knew all her troubles and gave her a little cup. The old woman said, "You must say to it, 'Little cup, boil,' and it will cook good sweet broth; and when you say, 'Little cup, stop,' it will stop cooking." The little girl brought the cup home to her mother, and they were not hungry or poor any more; and they ate the sweet broth as often as they wished.

One time when the little girl had gone away, the mother said, "Little cup, cook," and it boiled; and she

ate all she wanted. Then she wanted the cup to stop cooking, but she did not know the word, so it boiled and boiled until the broth ran out over the top; and it boiled and boiled the kitchen and house full.

And it boiled and boiled the second house and street full, as if it would feed the whole world. The people did not know what to do. At last, when only one house remained, the little girl came, and only said, "Little cup, stop," and it stopped boiling. But people who wished to come into the house had to eat their way in.

What is the central thought of the above? Why did trouble arise from the possession of the fairy's gift?

How should fairy gifts (good gifts) be treated?

How find a day-by-day application of this truth?

Try to adapt this for the reading lesson.

THE STAR DOLLARS.

Once upon a time there was a little girl whose father and mother were dead, and she was so poor that she had no little chamber to live in and no little bed to sleep in, and at last nothing at all but the clothes on her body and a little piece of bread in her hand.

But she was good, and because she was forgotten by the world she went, trusting in the dear God, out into the field. There she met an old man who said, "Oh, give me something to eat, I am so hungry!" She reached him the whole piece of bread and said, "God bless thee," and went farther.

There came a child that cried and said, "My head is so cold, give me something to cover it with."

Then the little girl took her cap and gave him. She went on a little farther, when another little child came; it had no little dress on and was freezing, and still farther another begged for her little coat, and to both of them she gave.

At last she came to a wood. It had grown dark, and one came and begged for her little slip. And the trusting child thought, "It is a dark night, no one sees me, I can give away my little slip; and she drew it off and gave it away, too, and as she stood there and had no more, there fell all at once stars from heaven; they were hard, bright dollars. She had on a new dress of finest linen. Then she gathered up the dollars and was rich for her life.

How can this story lead the child to an appreciation of his home and the service of his father and mother?

Children love this story — why?

What is the central truth?

Why is it both ethical and religious?

LITTLE RED RIDING HOOD.

NOTE. — The author has introduced this literal translation of Little Red Riding Hood here because, as it frequently appears in children's books, it is quite shorn of its ethical content.

Once upon a time there was a dear little girl whom everybody loved, but no one loved her so much as her grandmother, who wanted to give her everything. Once she gave her a little red hood made of satin, and because she looked so well in it, and would wear nothing else, she was called "Little Red Riding Hood."

One day her mother said to her: "Come, Little Red

Riding Hood, here are a piece of cake and a bottle of wine, carry them to grandmamma, she is sick and weak, they will do her good. Run away before it gets warm. Go like a pretty, good little girl, and be sure to keep to the path; for if you leave it you will break the glass, and grandmother will have nothing. When you go into her room do not forget to say 'Good morning,' and do not look around into all the corners."—"I will do it all nicely," said Little Red Riding Hood, giving her mother her hand.

The grandmother lived out in the wood a mile from the village. As Little Red Riding Hood came to the wood the Wolf met her, but Little Red Riding Hood did not know what a wicked beast he was, and was not afraid of him. "Good morning, Little Red Riding Hood," said he. — "My best thanks, Wolf." — "Where are you going so early, Little Red Riding Hood?"—"To grandmother's." — "What are you carrying under your apron?" — "Cake and wine. Yesterday we baked, so that we could send something to my poor, sick grandmother. It will do her good and make her strong."

"Little Red Riding Hood, where does your grandmother live?" — "A half mile farther, under three big oak trees, there stands her house; below is the nut hedge," said Little Red Riding Hood. The Wolf thought to himself, "That young, tender thing is a fat bit and will taste better than the old one. I must be cunning to catch both."

He went for a little while beside Red Riding Hood. Then he said: "Little Red Riding Hood, see the beautiful flowers all around us; why do you not look at them? I believe you never hear how sweetly the little

birds sing. You go along just as though you were going to school, and it is so nice out there in the wood."

Little Red Riding Hood lifted her eyes, and when she saw how the sunbeams danced through the wood that were full of beautiful flowers, she thought: "If I could only take grandmamma a fresh bouquet, it would make her so glad. It is so early that I shall be sure to be there in time." Then she went out of the path, into the wood, and began to look for flowers. And when she had picked one she always thought that beyond it was a prettier one and ran after it, and so she got farther and farther into the wood.

But the Wolf went straight on to the house of the grandmother and knocked on the door. "Who is there?"—"Little Red Riding Hood, who brings you cake and wine. Open the door."—"Only press on the latch," the grandmother called, "I am so weak that I cannot get up." The Wolf pressed on the latch and the door flew open, and he went without speaking straight to the bed of the grandmother and swallowed her. Then he put on her clothes, set her cap on his head, lay down in the bed, and pulled the curtains together.

Now Little Red Riding Hood was running about after flowers, and when she had found all she could carry, she thought of her grandmother and went back to the path. She was surprised that the door stood open; and when she went into the room all looked so strange that she thought, "O dear God, I feel so anxious and afraid to-day, and I always used to be so glad to come to grandmother's." She called, "Good morning," but no answer came. Then she went to the bed and pulled the

curtains back. There lay the grandmother with her cap down over her face, looking so strange!

"Oh, grandmother, what big ears you have!"—"That is so I can hear you better."—"Oh, grandmother, what big eyes you have!"—"That is so I can see you better."—"Oh, grandmother, what big hands you have!"—"That is so I can catch you better."—"But, grandmother, what a horrible great mouth you have!"—"That is so I can eat you better." Just as he said this the Wolf sprang out of bed and swallowed poor Little Red Riding Hood.

Now the Wolf felt satisfied, so he laid himself in bed again and began to snore very loud. But just then a hunter passed by the house. He thought: "How the old lady snores! I must see if something is the matter." He went into the house, and when he came to the bed he saw that the Wolf lay in it. "You here, you old sinner!" said he. "I have looked for you a long while." He was going to shoot when he thought that perhaps the Wolf had swallowed the grandmother. So he took the shears and began to cut the sleeping Wolf open. He had only made a few cuts when a little red hood came in sight, and only a few more and a little girl sprang out and cried: "Oh, how frightened I was! It was so dark in there." And then the old grandmother came out alive and could hardly breathe. But Little Red Riding Hood brought big stones to fill up the Wolf's body. When he woke up, he was going to spring away, but the stones were so heavy that he sank back and fell dead.

Then all three were happy. The hunter took off the Wolf's skin and went home with it. The grandmother

ate the cake and drank the wine and grew strong. But Little Red Riding Hood said, "As long as I live, I will never go out of the path again when my mother tells me not to."

What is the ethical teaching of this fairy tale?

What does the Wolf symbolize?

Why is such teaching of special worth to children?

Determine the unities or natural divisions in this story.

What are the true apperceiving ideas for the interpretation of the story?

What would be the danger in presenting this to children?

How could it be presented to avoid such danger?

How secure effective application without seeming to moralize.

THE ANXIOUS LEAF.

Once upon a time a little leaf was heard to sigh and cry, as leaves often do when a gentle wind is about. And the twig said, "What is the matter, little leaf?" and the leaf said, "The wind just told me that one day it would pull me off and throw me down on the ground to die."

The twig told it to the branch on which it grew, and the branch told it to the tree. And when the tree heard it, it rustled all over, and sent back word to the leaf, "Do not be afraid; hold on tightly, and you shall not go until you want to."

And so the leaf stopped sighing, but went on nestling and singing. Every time the tree shook itself and

stirred up all its leaves, the branches shook themselves, and the little twig shook itself, and the little leaf danced up and down merrily, as if nothing could pull it off. And so it grew all summer long until October.

And when the bright days of autumn came, the little leaf saw all the leaves around becoming very beautiful. Some were yellow and some were scarlet, and some were striped with both colors.

Then it asked the tree what it meant. And the tree said, "All these leaves are getting ready to fly away, and they have put on their beautiful colors because of joy."

Then the little leaf began to want to go too, and grew very beautiful in thinking of it; and when it was very gay in color, it saw that the branches of the tree had no color in them, and so the leaf said, "Oh, branches! why are you lead color and we golden?"

"We must keep on our work clothes, for our task is not done; but your clothes are for the holiday, because your work is finished."

Just then a little puff of wind came, and the leaf let go without thinking of it, and the wind took it up and turned it over and over, and whirled it like a spark of fire in the air, and then it fell gently down under the edge of the fence among hundreds of leaves, and fell into a dream and never waked up to tell what it dreamt about.

(*From* "Classic Stories for the Little Ones.")
By permission.

What time in the year would you choose for presenting the above?

What is the central truth?

Find the unities.

How help the child to get this truth for his own life?

Determine on the few important questions you would ask in teaching the above.

CLYTIE, THE SUNFLOWER.

Once upon a time there was a nymph named Clytie, who lived in a cave at the bottom of the sea. She loved her sea home, although it was dim and dark.

One day Clytie went to sleep in a great shell. It drifted through the water, and at last the big waves washed it ashore. Clytie awoke and stepped on the land. She had never seen land before; all was new and wonderful. At first she could hardly see because of the great brightness. What made it so bright?

Clytie looked up to the blue sky above her and saw the sun. Then she knew why the earth was so different from the dark sea. Her heart was filled with love for the great sun who made everything so bright and beautiful. Day by day she watched him, and she wished to be like him.

Now little Clytie, although she did not know it, was becoming more like the sun every day. At last her little feet became rooted in the earth where she had stood so long; her pretty green dress grew into a long stem with leaves upon it; her beautiful hair became bright golden petals. Little Clytie was a beautiful sunflower.

Select places where this story could be expanded in presenting it to the class.

Why does Clytie become so transformed?

What does the sun symbolize here?
What should the story mean to the child?

RAGGYLUG.

Long ago the Roses used to grow on bushes that had no thorns. But the Squirrels and Mice used to climb after them, the Cattle used to knock them off with their horns, the 'Possum would twitch them off with his long tail, and the Deer, with his sharp hoofs, would break them down. So the Brier bush armed itself with spikes to protect its roses and declared eternal war on all creatures that climbed trees or had horns, or hoofs, or long tails. This left the Brier bush at peace with none but Molly Cottontail, who could not climb, was hornless, hoofless, and had scarcely any tail at all.

In truth, the Cottontail had never harmed a Brier rose, and having now so many enemies, the Rose took the Rabbit into special friendship, and when dangers are threatening poor Bunny, he flies to the nearest Brier bush, certain that it is ready with a million keen and poisoned daggers to defend him.

(*From* "Wild Animals I Have Known," by Ernest Seton-Thompson.) *By permission.*

What elements in this story are educative?
What apperceiving ideas would a class need to appreciate it?
What great social truths are suggested?

SUPPOSED SPEECH OF JOHN ADAMS.

By Daniel Webster.

John Adams (1735–1826), the second President of the United States, was one of the heroes of the War of the Revolution, and helped to make the Declaration of Independence. His name was prominent among the signers of that noble document.

Daniel Webster, who was as great a patriot as Adams, many years after in one of his famous speeches imagined John Adams making an address before the Convention which framed the Declaration of Independence. The following is this supposed speech: —

Sink or swim, live or die, survive or perish, I give my hand and my heart to this vote. It is true, indeed, that in the beginning we aimed not at independence. But there's a divinity that shapes our ends. The injustice of England has driven us to arms; and, blinded to her own interest for our good, she has obstinately persisted till independence is now within our grasp. We have but to reach forth to it, and it is ours. Why, then, should we defer the Declaration? Is any man so weak as now to hope for a reconciliation with England, which shall leave either safety to the country and its liberties, or safety to his own life or his own honor? Are not you, sir, who sit in that chair, is not he, our venerable colleague near you, are you not both already the proscribed and predestined objects of punishment and vengeance? Cut off from all hope of royal clemency, what are you, what can you be, while the power of England remains, but outlaws?

If we postpone independence, do we mean to carry on or give up the war? Do we mean to submit to the measures of Parliament, Boston Port Bill and all? Do we mean to submit and consent that we shall be ground to powder, and our country and its rights trodden in the dust? I know we do not mean to submit. We never shall submit. Do we intend to violate the most solemn obligation ever entered into by men, that plighting before God of our sacred honor to Washington, when, putting him forth to incur the dangers of war, as well as the political hazards of the times, we promised to adhere to him in every extremity with our fortunes and our lives? I know there is not a man here who would not rather see a general conflagration sweep over the land, or an earthquake sink it, than one jot or tittle of that plighted faith fall to the ground. For myself, having twelve months ago, in this place, moved you that George Washington be appointed commander of the forces raised, or to be raised, for the defence of American liberty, may my right hand forget her cunning, and my tongue cleave to the roof of my mouth, if I hesitate or waver in the support I give him.

The war, then, must go on. We must fight it through. And if the war must go on, why put off longer the Declaration of Independence? That measure will strengthen us. It will give us character abroad. The nations will then treat with us, which they never can do while we acknowledge ourselves subjects, in arms against our sovereign. Nay, I maintain that England herself will sooner treat for peace with us on the footing of independence than consent, by repealing her acts, to acknowledge that her whole conduct toward

us has been a course of injustice and oppression. Her pride will be less wounded by submitting to that course of things which now predestinates our independence than by yielding the point in controversy with her rebellious subjects. The former she would regard as the result of fortune; the latter she would feel as her own deep disgrace. Why, then, sir, do we not change this from a civil to a national war! And since we must fight it through, why not put ourselves in a state to enjoy all the benefits of victory, if we gain the victory?

If we fail, it can be no worse for us. But we shall not fail. The cause will raise up armies; the cause will create navies. The people,—the people, if we are true to them, will carry themselves and will carry us gloriously through this struggle. I care not how fickle other people have been found. I know the people of these colonies, and I know that resistance to British aggression is deep and settled in their hearts and cannot be eradicated. Every colony, indeed, has expressed its willingness to follow, if we but take the lead. Sir, the Declaration of Independence will inspire the people with increased courage. Instead of a long and bloody war for the restoration of privileges, for redress of grievances, for chartered immunities, held under a British king, set before them the glorious object of entire independence, and it will breathe into them anew the spirit of life.

Read this Declaration at the head of the army; every sword will be drawn and the solemn vow uttered, to maintain it or perish on the bed of honor. Publish it from the pulpit; religion will approve it, and the

love of religious liberty will cling around it, resolved to stand with it or fall with it. Send it to the public halls; proclaim it there; let them see it, who saw their brothers and their sons fall on the field of Bunker Hill and in the streets of Lexington and Concord, and the very walls will cry out in its support.

Sir, I know the uncertainty of human affairs, but I see — I see clearly through this day's business. You and I, indeed, may rue it. We may not live to see the time that this Declaration shall be made good. We may die: die colonists; die slaves; die, it may be ignominiously and on the scaffold. Be it so. Be it so. If it be the pleasure of Heaven that my country shall require the poor offering of my life, the victim shall be ready, at the appointed hour of sacrifice, come when the hour may. But while I do live, let me have a country, or at least the hope of a country, and that a free country.

But whatever may be our fate, be assured — be assured that this Declaration will stand. It may cost treasure, and it may cost blood; but it will stand, and it will richly compensate for both. Through the thick gloom of the present, I see the brightness of the future, as the sun in heaven. We shall make this a glorious, an immortal day. When we are in our graves, our children will honor it. They will celebrate it with thanksgiving, with festivity, with bonfires and illuminations. On its annual return they will shed tears, — copious, gushing tears; not of subjection and slavery, not of agony and distress, but of exultation, of gratitude, and of joy.

Sir, before God, I believe the hour is come. My judgment approves the measure, and my whole heart is

in it. All that I have, and all that I am, and all that I hope, in this life, I am now ready here to stake upon it; and I leave off as I began, that, live or die, survive or perish, I am for the Declaration. It is my living sentiment, and by the blessing of God, it shall be my dying sentiment, Independence now and INDEPENDENCE FOREVER.

In what grade would you introduce this speech?

In relation to what other material?

What related ideas would you recall in order to secure an intelligent interpretation of the whole?

How help your class to project themselves into the selection?

How would you secure good expressive or oral reading of the speech?

THE DOG THAT LIED.[1]

JEAN AICARD.

I HAD trusted him fully for a long time—the fact is, we loved each other. He was a shepherd dog, snow-white, with a brown marking on the top of his head. I called him Pierrot (Per'ro'). He may have been the son of a circus dog; at any rate, he could climb trees and ladders, and perform other odd tricks. He was very fond of a little wooden ball about the size of a billiard-ball. One day he brought it to me, and sitting on his haunches said quite plainly: "Throw it away out on the grass. I'll find it—see if I don't!"

[1] *From* "The Heath Readers, No. 4." *By permission.*

I did as he wanted, and he succeeded perfectly. From that time on he became positively tiresome, for he was forever saying, "Let's have a game of ball!" Every time he had a chance he would come rushing into my study with his ball in his mouth, and standing on his hind legs, with his forepaws thrust into the midst of my papers and open books, he would exclaim: —

"Look, here's the ball! Throw it out of the window, and I will rush after it. It's great fun — see if it isn't! — much more amusing than your old novels and plays and newspapers."

Out the ball would seem to go; out Pierrot would rush, but, poor fellow, only to be deceived. For no sooner was he outside, than the ball would be laid on the table again to serve as a paper-weight. Pierrot, out on the lawn, would look and look, then, coming back under the window, he would cry out: —

"I say there, you literary fellow, this is a little too much! I can't find the ball at all. The fact is, there's nothing there. And if a passer-by hasn't taken it, then you have it, as sure as can be."

He would come upstairs again, poke his nose into my coat pockets, under the furniture, into the half-open drawers, and then, all of a sudden, with the air of a man who is struck with a bright idea, he would say playfully, "I'll wager that's the ball there on the table."

Of course I took good care not to wager with him, for it was in truth the ball. To hide it again I had to be quick, and then good-by to work! Those were lively times. Pierrot would leap after the ball, bound to have it at any cost. He would follow my slightest movements with the most agile counter-motions, all the time

on a broad smile — smiling in the only way a dog can; that is to say, constantly wagging his tail.

He often made me think of those men changed by magic into dogs, of whom we read in fairy tales. The glance of his eye had a tender, deep, and beseeching quality, which seemed to say humbly:—

"Don't ask too much of me. I am only what you see — a dog with four paws; but my heart is a human heart, a better one, indeed, than most men possess. Adversity has taught me much; I have suffered much. I suffer even at this moment, because I am not able to express to you, in words like your own, my loyalty and affection. Yes, I am devoted to you. I love you with the faithful love of a dog. I would die for you if necessary. Your property is my sacred trust. If anybody meddles with it, let him look out for himself!"

But after all, we quarrelled one day, and it was a bitter disappointment for me. Those who put their trust in dogs will understand. This is the way it happened.

The cook had killed two pigeons.

"I will serve them with peas," she said to herself.

She went into the storeroom to get a basket into which to put the feathers as she plucked the pigeons. When she came back into the kitchen she cried out in alarm. One of her pigeons was gone, and yet she hadn't been out of the room more than two seconds. A tramp going by had undoubtedly put his arm through the open window and stolen the bird. She rushed out to capture the tramp. Not a soul to be seen!

Then naturally she thought to herself, "The dog!" But, seized at once with remorse, she thought, "What a shame to suspect Pierrot! He's never stolen a mouth-

ful. Why, he'd stand watch all day over a leg of mutton without smelling of it, even if he were hungry. Moreover, there he is, still in the kitchen, lazily sitting on his haunches, with half-closed eyes, yawning from time to time. No, he's not thinking about my pigeons!"

True enough; there was Pierrot, half dozing, and seeming to have no interest in anything going on about him. I was called.

"Pierrot!"

He turned his sleepy eyes toward me as if saying: "Eh! what did you say, master? I was so comfortable. I was just thinking of the ball."

"I am of your opinion, Catherine — Pierrot did not steal your pigeon. If he had, he would be busy plucking it at the bottom of some ditch or other."

"Nevertheless, look at him, sir," said Catherine. "That dog hasn't the look of an honest Christian."

"What! would you say —"

"I say that at this very moment he has a guilty look about him."

"Look at me, Pierrot!" I said sharply. Hanging his head a little, he at once replied, in a somewhat grumbling tone: —

"Would I be quietly sitting here if I had stolen your pigeon? Certainly not; I should be busy plucking it!"

He was serving me with my own argument. This looked suspicious.

"Look at me," I ordered him; "straight in the face, like this!"

He put on an air of indifference! There was no longer any room for doubt in my mind. I turned sorrowfully to Catherine and said: —

"Ah, what a pity! he is guilty. I am sure of it!"

I am very serious when I say that what I saw in the eyes of that dog came upon me like a painful shock. I had distinctly seen there a human lie. He had tried to throw a false appearance of sincerity into his look, and had utterly failed. It is even impossible for man to do it. As for Pierrot, he exhausted himself in a vain effort. The deep desire to deceive was, in his very eyes, struggling with the feeble show of sincerity which he succeeded in bringing into play. The unaccomplished lie was a sadder revelation of his guilt than actual proof. Yet, in order to be blameless in the matter, I wanted absolute evidence.

"Here," I said to the guilty dog, "you may have this,"—and I gave him the odd pigeon. He looked at me and said thoughtfully to himself:—

"Hum! This is surprising. I see you suspect me and want to detect me. If not, why now give me a pigeon? Such a thing never happened before!"

He took the pigeon in his mouth, and then slowly put it down on the ground, saying, "I'm at least not a fool."

"But it's yours," I said; "I tell you it's yours. Don't you like pigeons? Then take this one. Besides, I had two of them, and I needed two. I can't do anything with one. I tell you again, this is for you."

I patted him, thinking all the while: "You wretched thief, you have betrayed my confidence as if you were a mean man. You are a poor beast!" adding aloud, "Good old Pierrot, brave old Pierrot, fine fellow!"

On this he decided to accept my gift, picked up the

pigeon, rose, and went out slowly, turning his face toward me now and then, as if trying to read my real mind. As soon as he was outside I closed the door, and looked out through the glass panels on the side to see what he would do.

He took a few steps as if he proposed to go to some out-of-the-way place to eat his prize. Then he stopped, dropped the pigeon on the ground, and thought for a long time. Several times he turned his deceitful eyes toward the door. Then he gave up trying to find an explanation of the case, contented himself with the facts as they were, picked up the pigeon, and walked off. And as he disappeared, his drooping tail, which had expressed timidity and doubt in all its motions during our talk in the kitchen, assumed an air of more self-respect, as if Pierrot was saying: "Bah! Take things as they come! Nobody cares for me!"

I followed him at a distance, and surprised him in the act of digging a hole in the ground with his paws in a very lively fashion. The pigeon I had given him was lying beside the hole on which he was working. I dug the hole a little deeper and, behold! there was the stolen pigeon skilfully hidden. I was confounded! My good friend Pierrot not only followed the habits of his progenitors, the foxes and wolves, and buried his food, but he followed the habits of civilized life, *and had learned to lie!*

While the dog was watching me I gathered and tied together some of the largest feathers of my two pigeons, like a small feather duster, and put them on my study table. After that, whenever Pierrot brought me his ball, saying with a frank and open smile, "What! work-

ing? Stop and have a game with me!" I would lift the little feather duster, and Pierrot would hang his head, his tail would droop in shame, the ball would fall from his mouth, and he would sadly exclaim, "Will you never forgive me?"

"You do not love me," I said to him one morning. "No, you do not love me, for you lied to me, and planned to do it."

A kindly voice—whose it was or whence it came I do not know—replied: "Yes, he does love you, my friend, and you still love him sincerely. He has been punished enough by this time. Let bygones be bygones."

I picked up the little feather duster, but this time Pierrot did not seem to fear it. "You see it for the last time," I said; "thus shall the record of your guilt perish!" and I threw the thing into the fire. Pierrot, gravely seated on his haunches, watched it burn. Then, without any burst of emotion, without leaps or bounds, but simply, nobly, he came to lick my hand. A feeling of indescribable happiness filled my heart. It was the happiness of forgiving.

In a low voice my dog said to me: "I know what you feel; I know that happiness, too. For how many things have I forgiven you without your knowing it!"

What is the literary value of this story?

Why is it an ideal picture of a right relation to domestic animals?

What is its especial ethical import?

What are its elements of interest for the child?

Suggest best method of using the vocabulary at the end of this selection.

APPENDIX III.

HERVÉ RIEL.

By Robert Browning.

On the sea and at the Hogue, sixteen hundred ninety-two,
Did the English fight the French, — woe to France!
And the thirty-first of May, helter-skelter through the blue,
Like a crowd of frightened porpoises a shoal of sharks pursue,
Came crowding ship on ship to St. Malo on the Rance,
With the English fleet in view.
'Twas the squadron that escaped, with the victor in full chase,
First and foremost of the drove, in his great ship, Damfreville;

Close on him fled, great and small,
Twenty-two good ships in all;
And they signalled to the place,
"Help the winners of race!

Get us guidance, give us harbor, take us quick, — or, quicker still,
Here's the English can and will!"

Then the pilots of the place put out brisk, and leaped
on board;
"Why, what hope or chance have ships like these to
pass?" laughed they;
"Rocks to starboard, rocks to port, all the passages
scarred and scored,
Shall the *Formidable* here, with her twelve-and-eighty
guns,
Think to make the river mouth by the single narrow
way,
Trust to enter where 'tis ticklish for a craft of twenty
tons,

And with flow of full beside?
Now 'tis slackest of ebb tide
Reach the mooring? Rather say,
While rock stands, or water runs,
Not a ship will leave the bay!"

Then was called a council straight;
Brief and bitter the debate.

"Here's the English at our heels; would you have them
take in tow
All that's left us of the fleet, linked together, stern and
bow;

For a prize to Plymouth Sound?
Better run the ships aground!"
(Ended Damfreville his speech)
"Not a minute more to wait!
Let the captains, all and each,

Shove ashore, then blow up, burn the vessels on the beach!

France must undergo her fate."
"Give the word!" but no such word
Was ever spoke or heard;

For up stood, for out stepped, for in struck, amid all these —
A captain? a lieutenant? a mate? — first, second, third?

No such man of mark and meet
With his betters to compete!

But a simple Breton sailor, pressed by Tourville for the fleet,
A poor coasting pilot, he, — Hervé Riel, the Croisickese.

And, "What mockery or malice have we here?" cried Hervé Riel.
"Are you mad, you Malouins? Are you cowards, fools, or rogues?
Talk to me of rocks and shoals? — me, who took the soundings, tell
On my fingers every bank, every shallow, every swell,
'Twixt the offing here and Grève, where the river disembogues?
Are you bought by English gold? Is it love the lying's for?

"Morn and eve, night and day,
Have I piloted your bay,

Entered free and anchored fast at the foot of Solidor.
Burn the fleet, and ruin France? That were worse than
fifty Hogues!
Sirs, then know I speak the truth! Sirs, believe me,
there's a way!

"Only let me lead the line,
Have the biggest ship to steer,
Get this *Formidable* clear,
Make the others follow mine;

And I lead them most and least, by a passage I know
well,

Right to Solidor, past Grève,
And there lay them safe and sound;
And if one ship misbehave,—
Keel so much as grate the ground,—

Why, I've nothing but my life; here's my head!"
cries Hervé Riel.

Not a minute more to wait.
"Steer us in, then, small and great!

Take the helm; lead the line; save the squadron!"
cried its chief.

"Captains, give the sailor place!"
He is Admiral, in brief.
Still the north wind, by God's grace,
See the noble fellow's face
As the big ship, with a bound,
Clears the entry like a hound,

Keeps the passage as its inch of way were the wide sea's profound!

See! safe through shoal and rock,
How they follow in a flock.

Not a ship that misbehaves, not a keel that grates the ground,

Not a spar that comes to grief;
The peril, see, is past,
All are harbored to the last;

And just as Hervé Riel halloes, "Anchor!" sure's fate,
Up the English come, — too late.

So the storm subsides to calm;
They see the green trees wave
On the heights o'erlooking Grève;
Hearts that bled are stanched with balm.
"Just our rapture to enhance,
Let the English rake the bay,
Gnash their teeth and glare askance
As they cannonade away!

'Neath the rampired Solidor pleasant riding on the Rance!"
How hope succeeds despair on each captain's countenance!

Out burst all with one accord,
"This is Paradise for Hell!
Let France, let France's king
Thank the man who did the thing!"

What a shout, and all one word,
"Hervé Riel!"
As he stepped in front once more,
Not a symptom of surprise
In the frank blue Breton eyes —
Just the same man as before.

Then said Damfreville, "My friend,
I must speak out at the end,
Though I find that speaking hard:
Praise is deeper than the lips;
You have saved the King his ships;
You must name your own reward.
Faith, our sun was near eclipsed!
Demand whate'er you will,
France remains your debtor still.

Ask to heart's content, and have! or my name's not Damfreville!"

Then a beam of fun outbroke
On the bearded mouth that spoke,
As the honest heart laughed through
Those frank eyes of Breton blue;
"Since I needs must say my say,
Since on board the duty's done,

And from Malo Roads to Croisic Point, what is it but a run?

Since 'tis ask and have I may;
Since the others go ashore, —
Come! A good whole holiday!

Leave to go and see my wife, whom I call the Belle Aurore!"
That he asked, and that he got, — nothing more.

Name and deed alike are lost;
Not a pillar nor a post

In his Croisic keeps alive the feat as it befell;

Not a head in white and black
On a single fishing smack

In memory of the man but for whom had gone to wrack
All that France saved from the fight whence England bore the bell.

Go to Paris; rank on rank
Search the heroes flung pell-mell
On the Louvre, face and flank;

You shall look long enough ere you come to Hervé Riel.

So, for better and for worse,
Hervé Riel, accept my verse!

In my verse, Hervé Riel, do thou once more
Save the squadron, honor France, love thy wife, the Belle Aurore!

By permission of HOUGHTON, MIFFLIN & Co.

(For the analysis of this poem, see Chapter XIII.)

Make a list of important patriotic poems; try to give the central thought of each a clearly individual putting.

Why is patriotism a moral quality?

Try to determine when it begins naturally to develop in the life of a child.

APPENDIX IV.

STUDY OF MACBETH.

MADE BY THE CLASS IN ETHICS IN THE OSWEGO NORMAL SCHOOL.

THE central thought of play: The deed returns upon the doer.

NOTE. — The whole action centres in the forces which lead up to the deed and the consequences that result from it.

Act I. Conditions that lead up to the deed.

Scene I. The foreshadowing of the deed.

Evil forces are represented as astir, on tiptoe, expectant. "There to meet with Macbeth."

NOTE. — The witches seem to stand as types of evil forces of a purely spiritual sort that "attend on mortal thought." They are the only supersensible powers to which Macbeth turns for aid.

Scene II. Introduction to human forces that are at work. (This scene gives the objective view as the first scene gives a view of the supersensible.)

Trend of forces in this scene is toward the stimulation of ambitious desires.

Scene III. The suggestion leading to the deed.

Macbeth's readiness for the suggestion speaks of his familiarity in desire with that which is suggested. "If chance will have me king, why chance may crown me."

Scene IV. Reënforcement of suggestion by fresh incentive.

> "That is a step
> On which I must fall down, or else o'erleap,
> For in my way it lies."

> "Let not light see my black and deep desires."

Scene V. Foreshadowing of opportunity for the crime. Attention of both actors turns to this opportunity.

NOTE. — A second actor enters in the form of Lady Macbeth, who represents the element of will, as Macbeth represents the element of desire.

Scene VI. Brings all the actors together.

Scene VII. The choice.

Note Macbeth's deliberation.

Note the character of Macbeth and of Lady Macbeth as exhibited here.

Act II. The deed.

Scene I. Macbeth's vision.

NOTE. — Macbeth shows in this scene that he has already entered into the world of "wicked dreams," opened to him by his choice.

> "Now o'er the one half world
> Nature seems dead, and wicked dreams abuse
> The curtain'd sleep."

Scene II. The crime.

The real sentence of the crime, *i.e.* the subjective

results, begin to appear at once. "Sleep no more." Remorse is sleepless.

"Wake Duncan with thy knocking! I would thou couldst!"

"To know my deed, 'twere best not know myself."

Scene III. The discovery of the deed.

"To show an unfelt sorrow is an office
Which the false man does easily."

Scene IV. Macbeth made King. The immediate objective result of the deed.

"But this sore night
Hath trifled former knowings."

Compare the unrest of nature represented here with that in "Julius Cæsar," Act I., Scene III.

Act III. The exactions of the deed.

"Blood will have blood."
"Strange things I have to hand."
"We are yet but young in deed."

Scene I. A second crime planned for safety.

"But to be safely thus."

Note the appearance of new elements of remorse in this scene: sense of insecurity, rebuke of the good, fear of the good, deep discontent, bitterness of the coveted fruit when tasted.

Scene II. Lady Macbeth, the tacit accomplice in a second crime.

"Things bad begun make strong themselves by ill."

Note additional features of remorse: loneliness, brooding, sleep without rest, etc.

Scene III. The second crime.

Scene IV. The second sentence.

Scene V. (1) Macbeth fully under Hecate's control. (2) More potent forces of evil enter the scene and predict deeper disaster.

Scene VI. Disintegrating influence of the crime working outward into the country at large. Signs of general disaffection.

Act IV. The widespread disintegrating power of the deed.

Scene I. Macbeth's deliberate alliance with the powers of evil.

"From this moment
The very firstlings of my heart shall be
The firstlings of my hand."

Scene II. The third crime. The harmless are struck.

Scene III. Disruption of the state. The universal terror. War foreshadowed.

(Compare with Anthony's speech over the body of Cæsar, "Julius Cæsar," Act III., Scene I.)

Act V. The full return of the deed upon the doers.

Scene I. The remorse of Lady Macbeth.

"All the perfumes of Arabia will not sweeten this little hand."

Scene II. Union of the wronged country for the restoration of civil and social order.

Scene III. Macbeth forsaken. The loneliness of crime.

"I have lived long enough," etc.

Scene IV. Union of opposing forces.

Scene V. Death of Lady Macbeth.

"I have supp'd full with horrors."

(See Burne-Jones's picture of the death of Lady Macbeth.)

Scene VI. Birnam before Dunsinane.

Scene VII. The fall of the castle.

"Tyrant show thy face!"

Scene VIII. Death of Macbeth.

1. How did the Witches' prophecy serve to excite Macbeth to the deed?
2. How did the new honors bestowed upon Macbeth serve to excite him to the deed?
3. Where do you see a conflict of desires in Macbeth?
4. Where does Lady Macbeth see the opportunity to murder Duncan?

When did she determine to seize this opportunity?

5. Where do you find anything approaching deliberation on the part of Lady Macbeth?
6. Why is this not true deliberation?
7. When is the deed virtually settled on? Why?
8. What is the influence of these two minds on each other?
9. Had Macbeth been left alone, what would have been his probable course in the murder of Duncan?
10. Had Lady Macbeth been left alone, how would she probably have received Duncan?
11. When and how do the effects of deliberate crime begin to be felt?
12. What three important traits of remorse are shown in Act II., Scene II.?
13. Distinguish between regret and repentance. Which is allied to remorse?
14. What new elements of remorse are added in Scene I., Act III.
15. What change in the will of Macbeth is shown in this scene?
16. What added features of remorse appear in Scene II., Act II.?
17. What is the influence of Lady Macbeth's tacit consent to the murder of Banquo on Macbeth?
18. Account for the ghost companion that appears in Scene IV., Act III.
19. How do you account for the marked change in Lady Macbeth at this time?
20. What immediate effect of the second crime is

shown in Macbeth in the last speeches of this scene?

21. Compare the motives that led up to the two crimes.
22. How account for the feeling expressed in the last words in this scene, "We are but young in deed"?
23. Compare this with "Julius Cæsar."
24. Account for the appearance of Hecate in Scene V., Act III.
25. Why should Shakespeare introduce war as one of the results of this crime?
26. What passage in Act I., Scene IV., shows Macbeth's attitude toward society and proves him the anti-social being?
27. What relation do you find between the prophecy made by the first apparition and Macbeth's own thought?
28. What is the immediate influence of these prophecies on Macbeth? Quote passages to prove.
29. What motive moves him to this third and most dreadful deed?
30. Why does Scene II., Act IV., represent a deeper tragedy than any that has preceded?
31. Why does it make a stronger appeal to the sympathies of the reader?
32. Quote passages in this scene that show that Macbeth's sins had loosened social bonds in his kingdom.
33. In what way does Scene II., Act IV., show the strength and importance of civil bonds?
34. Quote passages to show that both Malcolm and Macduff possess patriotism.

35. Analyze their picture of Macbeth.
36. What would have been the result if Macbeth had possessed true patriotism?
37. On what had the mind of Lady Macbeth dwelt most? Scene I., Act V.
38. Distinguish between a sense of guilt and sorrow for guilt. Which does Lady Macbeth show?
39. What is there here to suggest the cause of her death?
40. What changes does Scene II. show in the mind of Macbeth?
41. Account for brutality that appears in this scene; for the want of continuity in thought and act.
42. What are the effects of remorse as judged from this scene?
43. Compare the sorrow of Macbeth in Scene V. with that of Macduff.
44. What is Macbeth's philosophy of life as shown in this scene?
45. Why does Macbeth leave his castle when his military strength bids him stay there?
46. What is Macbeth's view of his own course at last?
47. What is his view of the Witches?
48. Trace the stages in the moral decline of Macbeth. What are the causes at each step? How does this decline express itself?

FORTY FAVORITE BOOKS.

NOTE. — This study was made from the "Favorite Books of Three Thousand Boston Children." The author here extends her thanks to Miss Sarah Louise Arnold through whose courtesy the material was obtained. The grades represented are the fourth to the ninth inclusive. By selecting schools in widely different localities, the material secured was believed to be fairly representative.

The fact that children naturally like good books is suggested by this list. The persistence of certain favorite stories that belong to earlier grades is also noteworthy.

The choice of boys and girls are indicated, and the most popular books are starred.

	GRADES.					
	4th	5th	6th	7th	8th	9th
Alice in Wonderland *Carroll*	B G*	G*	G*	G*	G	G*
American History Stories *Pratt*	B G		B			
Andersen's Fairy Tales	B G	G	G	G		
An Old-Fashioned Girl *Alcott*				G*	G*	G
Arabian Nights	B	B G	B			
Beautiful Joe. *Sewell*	B*	B*G*	G	G		
Black Beauty. *Sewell*	B*G*	B*G*	B*G*	B G*	B G	G
Cinderella	B G	G*				
Each and All. *Andrews*	G	G				
Editha's Burglar. *Burnett*	B*	G	G*	G		
Eight Cousins. *Alcott*				G	G	
Fifty Famous Stories Retold. *Baldwin*	B*G*					

	Grades.					
	4th	5th	6th	7th	8th	9th
Five Little Peppers and How They Grew *Lothrop*	B G	B G	G*	G*	G	
Grimm's Fairy Tales	B G	B G*	G			
Hans Brinker. *Dodge*				B*G*	G*	
Heidi. *Spyri*				G*	G*	
How Marjorie Helped *Brooks*			G*		G*	
Jack the Giant Killer	B* G					
John Halifax, Gentleman *Mulock*			G	G	G	G
Life of Washington *Bancroft*	B G	B	B	B G	B	
Little Lord Fauntleroy *Burnett*	B*G	G*	G*	G*		
Little Men. *Alcott*	G	B G	B G*	G*	G*	G
Little Red Riding Hood	G*	G				
Little Women. *Alcott*	G	B G*	B G*	G*	G*	G*
Longfellow's Poems	B G*	B G*	G	G*	B G	B G*
Pinnocio's Adventures in Fairy Land		B*				
Play Days. *Jewett*	G*					
Robinson Crusoe. *Defoe*	B*G*	B*G*	B*G*	B G*	B	
Seven Little Sisters *Andrews*	B G*	G	G			
Standish of Standish *Austin*				G	G	G
Stories of American History. *Dodge*	B*					
Swiss Family Robinson *Wyss*	B	B				
The Birds' Christmas Carol. *Wiggin*		G*	G	G*	G	
The Three Margarets *Richards*			G*	G		
The Story of a Short Life *Ewing*					G*	
The Wonde *Hawthorne*	B	G				
Tom Brown's School Days *Hughes*		B	B		B	B
Uncle Tom's Cabin. *Stowe*	B	B*	B*G	B*G*	B*G*	G*
Water Babies. *Kingsley*	G					
What Katy Did. *Woolsey*					G